

## 9.0 Permit Conditions Applicable to Specific States (including Territories) and Indian Country Lands

The provisions of this Part provide modifications or additions to the applicable conditions of this permit to reflect specific additional conditions required as part of the state or tribal CWA Section 401 certification process, or the Coastal Zone Management Act (CZMA) certification process, or as otherwise established by the permitting authority. The specific additional revisions and requirements only apply to activities in those specific states, Indian country, and federal facilities. States, Indian country and federal facilities not included in this Part do not have any modifications or additions to the applicable conditions of this permit.

### 9.1 EPA Region 1

#### 9.1.1 Commonwealth of Massachusetts, except Indian country

- a. The Department concurs that applicants for coverage under the Pesticide General Permit should be authorized to discharge as long as the following conditions are met:

- i. State conditions specific to Aquatic Weed and Algae Control section of the Pesticide General Permit:

*(In accordance with Massachusetts General Law Chapter 111, Section 5E unless otherwise noted)*

1. The Massachusetts Department of Environmental Protection must provide written approval of the Pesticide General Permit Notice of Intent prior to the applicant receiving coverage under the permit.
2. Applicants for coverage under this permit are hereby notified that issuance of this concurrence letter does not in any way constitute the Massachusetts Department of Environmental Protection's approval of the chemical treatment as it relates to the provisions of the Wetlands Protection Act. *(Massachusetts General Law Chapter 131, Section 40).*
3. Chemical treatments must be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Bureau *(Massachusetts General Law Chapter 132B, Section 10 and 333 Code of Massachusetts Regulations 10.00).*
4. Chemicals used for treatments must be currently approved for use in the state by the Massachusetts Department of Agricultural Resources Pesticide Bureau *(Massachusetts General Law Chapter 132B, Section 6 and 333 Code of Massachusetts Regulations 6.00).*
5. Since chemical treatments constitute the alteration of wetland resources, a Notice of Intent must be filed in accordance with the Wetlands Protection Act *(Massachusetts General Law Chapter 131, Section 40)* and Wetlands Protection Regulations *(310 Code of Massachusetts Regulations 10.00)*. This condition does not apply when treatment is undertaken with algicide containing copper approved by the Massachusetts Department of Environmental Protection and used by legally established water supply

agencies to control taste and odors. (*310 Code of Massachusetts Regulations 22.20B(8)*). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).

6. Applicants for coverage under this permit shall obtain a final Order of Conditions or Negative Determination of Applicability (Wetlands Protection Act) from the local Conservation Commission or a Massachusetts Department of Environmental Protection Emergency Order prior to treatment (*Massachusetts General Law Chapter 40, Section 8C*). Applicants are required to provide a copy of a valid Order of Conditions or Negative Determination of Applicability annually to the Department of Environmental Protection prior to application of chemicals authorized under this permit. This condition does not apply when treatment is undertaken with algaecide containing copper approved by the Massachusetts Department of Environmental Protection and used by legally established water supply agencies to control taste and odors. (*310 Code of Massachusetts Regulations 22.20B(8)*). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
7. Shoreline areas of the lake or pond must be posted with signs warning the general public of any water use restrictions stated on the chemical label for a minimum of one week. This is especially important at bathing beaches and other areas of common access. The signs shall clearly state that the chemical treatment is being conducted pursuant to a permit issued by the US Environmental Protection Agency "EPA" and the Massachusetts Department of Environmental Protection "MassDEP". A new sign shall be posted for each treatment event. This condition does not apply when treatment is undertaken with algaecide containing copper approved by the Massachusetts Department of Environmental Protection and used by legally established water supply agencies to control taste and odors. This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
8. The Massachusetts Department of Environmental Protection may require the applicant for coverage under this permit to cease application of chemicals to a body of water at any time following the issuance of coverage under this permit if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on

- current water uses, or will produce unnecessary adverse side effects on non-target flora or fauna.
9. Chemical application shall be applied in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.
  10. Issuance of coverage under this permit does not release the applicant for coverage under this permit from liability resulting from the negligent or reckless application of chemicals.
  11. Applicants must implement state conditions for the use of alum (appended). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
  12. Applicants must implement state conditions for electronic notification (appended). This condition does not apply when treatment is undertaken with algaecide containing copper approved by the Massachusetts Department of Environmental Protection and used by legally established water supply agencies to control taste and odors. This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
  13. Applicants must implement state conditions for the use of products containing 2,4-D (appended). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
  14. Applicants must implement state conditions for any chemical or site specific situation as deemed necessary by the Massachusetts Department of Environmental Protection.
  15. By December 31<sup>st</sup> each year the applicant for coverage under this permit shall submit, in electronic form, an annual Treatment Summary report to the Massachusetts Department of Environmental Protection certifying the treatment date, application rate, location and the total weight/volume for each chemical used in the treatment. This condition does not apply when treatment is undertaken with algaecide containing copper approved by the Massachusetts Department of Environmental Protection and used by legally established water supply agencies to control taste and odors. This condition does not apply to the introduction of pollutants from nonpoint

source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).

16. The NOI shall indicate whether the proposed treatment is within a Zone II of a drinking water groundwater supply.
17. The NOI shall indicate whether the proposed treatment is to a surface public water supply.
- ii. State conditions specific to Aquatic Nuisance Animal Control section of the Pesticide General Permit:

*(In accordance with Massachusetts General Law Chapter 111, Section 5E unless otherwise noted)*

1. The Massachusetts Department of Environmental Protection must provide written approval of the Pesticide General Permit Notice of Intent prior to the applicant receiving coverage under the permit.
2. Applicants for coverage under this permit are hereby notified that issuance of this concurrence letter does not in any way constitute the Massachusetts Department of Environmental Protection's approval of the chemical treatment as it relates to the provisions of the Wetlands Protection Act. *(Massachusetts General Law Chapter 131, Section 40)*.
3. Chemical treatments must be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Bureau *(Massachusetts General Law Chapter 132B, Section 10 and 333 Code of Massachusetts Regulations 10.00)*.
4. Chemicals used for treatments must be currently approved for use in the state by the Massachusetts Department of Agricultural Resources Pesticide Bureau *(Massachusetts General Law Chapter 132B, Section 6 and 333 Code of Massachusetts Regulations 6.00)*.
5. Since chemical treatments constitute the alteration of wetland resources, a Notice of Intent must be filed in accordance with the Wetlands Protection Act *(Massachusetts General Law Chapter 131, Section 40)* and Wetlands Protection Regulations *(310 Code of Massachusetts Regulations 10.00)*. This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities *(314 Code of Massachusetts Regulations 3.05(5))* or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
6. Applicants for coverage under this permit shall obtain a final Order of Conditions or Negative Determination of Applicability (Wetlands Protection Act) from the local Conservation Commission or a Massachusetts Department of Environmental Protection Emergency Order prior to treatment *(Massachusetts General Law Chapter 131, Section 40)*. This condition does not apply to the introduction of pollutants from

nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).

7. Shoreline areas of the lake or pond must be posted with signs warning the general public of any water use restrictions stated on the chemical label for a minimum of one week. This is especially important at bathing beaches and other areas of common access. The signs shall clearly state that the chemical treatment is being conducted pursuant to a permit issued by the US Environmental Protection Agency "EPA" and the Massachusetts Department of Environmental Protection "MassDEP". A new sign shall be posted for each treatment event. This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
8. The Massachusetts Department of Environmental Protection may require the applicant for coverage under this permit to cease application of chemicals to a body of water at any time following the issuance of coverage under this permit if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on current water uses, or will produce unnecessary adverse side effects on non-target flora or fauna.
9. Chemical application shall be applied in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.
10. Issuance of coverage under this permit does not release the applicant for coverage under this permit from liability resulting from the negligent or reckless application of chemicals.
11. Applicants must implement state conditions for any chemical or site specific situation as deemed necessary by the Massachusetts Department of Environmental Protection.
12. By December 31<sup>st</sup> each year the applicant for coverage under this permit shall submit, in electronic form, an annual Treatment Summary report to the Massachusetts Department of Environmental Protection certifying the treatment date, application rate, location and the total weight/volume for each chemical used in the treatment. This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).

13. The NOI shall indicate whether the proposed treatment is within a Zone II of a drinking water groundwater supply.
  14. The NOI shall indicate whether the proposed treatment is to a surface public water supply.
  15. Applicants must implement state conditions for the use of products containing 2,4-D (appended). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
  16. Applicants must implement state conditions for electronic notification (appended). This condition does not apply to the introduction of pollutants from nonpoint source agricultural and silvicultural activities (*314 Code of Massachusetts Regulations 3.05(5)*) or normal maintenance or improvement of land in agricultural use as defined in 310 Code of Massachusetts Regulations 10.04 and 314 Code of Massachusetts Regulations 9.03(4).
- iii. State conditions specific to Mosquito and Other Flying Pest Control section of the Pesticide General Permit:
- (In accordance with Massachusetts General Law Chapter 252 unless otherwise noted)*
1. The Massachusetts Department of Environmental Protection must provide written approval of the Pesticide General Permit Notice of Intent prior to the applicant receiving coverage under the permit.
  2. Applicants for coverage under this permit are hereby notified that issuance of this concurrence letter does not in any way constitute the Massachusetts Department of Environmental Protection's approval of the chemical treatment as it relates to the provisions of the Wetlands Protection Act (*Massachusetts General Law Chapter 131, Section 40*).
  3. Applicants for coverage under this permit are hereby notified that issuance of this concurrence letter does not in any way constitute the Massachusetts Department of Fisheries and Wildlife approval of the chemical treatment as it relates to the provisions of the Rare & Endangered Species Act (*321 Code of Massachusetts Regulations 10.04*).
  4. Chemical treatments must be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Bureau (*Massachusetts General Law Chapter 132B, Section 10 and 333 Code of Massachusetts Regulations 10.00*) and in accordance with any provisions or policies instituted by the State Reclamation and Mosquito Control Board (*Massachusetts General Law Chapter 252*).
  5. Chemicals used for treatments must be currently approved for use in the state by the Massachusetts Department of Agricultural Resources Pesticide

Bureau (*Massachusetts General Law Chapter 132B, Section 6 and 333 Code of Massachusetts Regulations 6.00*).

6. Applicants for coverage under this permit must adhere to the public notification provisions of the Child Protection Act (*Chapter 85 of the Acts of 2000*).
  7. The Massachusetts Department of Environmental Protection may require the applicant for coverage under this permit to cease application of chemicals to a body of water at any time following the issuance of coverage under this permit if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on current water uses, or will produce unnecessary adverse side effects on non-target flora or fauna.
  8. Chemical application shall be applied in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.
  9. Issuance of coverage under this permit does not release the applicant for coverage under this permit from liability resulting from the negligent or reckless application of chemicals.
  10. Applicants must implement state conditions for any chemical or site specific situation as deemed necessary by the Massachusetts Department of Environmental Protection.
  11. Applicants must comply with state law and regulations regarding spills and leaks associated with the application of pesticides covered under this permit. (*Massachusetts General Law Chapter 132B, 333 Code of Massachusetts Regulations 10.00 and Massachusetts General Law Chapter 21E, Section 7*).
- iv. State conditions specific to Forest Canopy Pest Control section of the Pesticide General Permit:
- (*In accordance with Massachusetts General Law Chapter 252 & 132B and 333 Code of Massachusetts Regulations 13.00 unless otherwise noted*)
1. The Massachusetts Department of Environmental Protection must provide written approval of the Pesticide General Permit Notice of Intent prior to the applicant receiving coverage under the permit.
  2. Applicants for coverage under this permit are hereby notified that issuance of this concurrence letter does not in any way constitute the Massachusetts Department of Environmental Protection's approval of the chemical treatment as it relates to the provisions of the Wetlands Protection Act. (*Massachusetts General Law Chapter 131, Section 40*).
  3. Chemical treatments must be performed by an applicator currently licensed by the Massachusetts Department of Agricultural Resources Pesticide Bureau (*Massachusetts General Law Chapter 132B, Section 10 and 333 Code of Massachusetts Regulations 10.00*).

4. Chemicals used for treatments must be currently approved for use in the state by the Massachusetts Department Agricultural Resources Pesticide Bureau (*Massachusetts General Law Chapter 132B, Section 6 and 333 Code of Massachusetts Regulations 6.00*).
5. The Massachusetts Department of Environmental Protection may require the applicant for coverage under this permit to cease application of chemicals to a body of water at any time following the issuance of coverage under this permit if the Department determines that the chemical treatment will be ineffective, or will result in unreasonable restrictions on current water uses, or will produce unnecessary adverse side effects on non-target flora or fauna.
6. Chemical application shall be applied in accordance with the manufacturer's label directions, existing pesticide use laws, and any conditions imposed by other local or state agencies.
7. Issuance of coverage under this permit does not release the applicant for coverage under this permit from liability resulting from the negligent or reckless application of chemicals.
8. Applicants must implement state conditions for any chemical or site specific situation as deemed necessary by the Massachusetts Department of Environmental Protection.

v. APPENDIX - STATE POLICIES:

1. Alum/aluminum sulfate treatment conditions:

- a.) In all cases the chemicals added may not cause or contribute to any fish kill or other negative aquatic impact.
- b.) pH and alkalinity: The pH of the pond or lake water must be maintained within a pH range of 6.0 - 7.5 to minimize potential aluminum solubility and toxicity. If the pond has an ambient pH outside this range the applicant should adjust the treatment as needed to attain the pH range, and if the final pH after treatment is still not within the range then water samples from treated and untreated areas should be sampled and analyzed for total aluminum and dissolved aluminum with detection limits of 10 ppb or less.
- c.) Reporting: Any observations of dead, dying or stressed fish (e.g. fish swimming at the surface) or wildlife deemed to be caused by the approved treatment shall be reported as quickly as possible to the MA Department of Environmental Protection and the Massachusetts Division of Fisheries & Wildlife. Any pH reading outside the target range of 6.0 - 7.5 should be further investigated and reported to the MA Department of Environmental Protection. All required water quality monitoring data, fish and wildlife observations and a narrative description of the treatment, including any on-site modifications to the application plan to maintain pH within the desired range shall be



included in the report to the MA Department of Environmental Protection certifying the treatment specifics.

2. Electronic Notification: Electronic notification of treatment must be made to the Massachusetts Division of Fisheries & Wildlife ([Richard.Hartley@state.ma.us](mailto:Richard.Hartley@state.ma.us) and [Colleen.Hubbard@state.ma.us](mailto:Colleen.Hubbard@state.ma.us)) and the Massachusetts Department of Environmental Protection ([Robert.Kubit@state.ma.us](mailto:Robert.Kubit@state.ma.us)). Notification that treatment was performed or postponed shall be made within 24 hours of treatment. The notification message should include waterbody, town, state tracking number and chemicals used.
3. Use of Products Containing 2,4-D: Prior to each use of any product containing 2,4-D, applicants must request and receive written approval from the Massachusetts Department of Environmental Protection. Each request will be reviewed for potential impact to drinking water wells and site specific conditions may be required. At a minimum, the applicant must provide notice to all lake abutters prior to treatment with 2,4-D. A copy of the notice sent to abutters, date sent and list of those it was sent to must be included in the annual Treatment Summary report.

9.1.2 Indian Country lands within the State of Massachusetts

- a. No additional requirements

9.1.3 Indian Country lands within the State of Connecticut

- a. No additional requirements

9.1.4 State of New Hampshire

- a. No additional requirements

9.1.5 Indian Country lands within the State of Rhode Island

- a. No additional requirements

9.1.6 Federal Facilities in the State of Vermont

- a. No additional requirements

## **9.2 EPA Region 2**

9.2.1 Indian Country lands within the State of New York

- a. No additional requirements

9.2.2 The Commonwealth of Puerto Rico

- a. No additional requirements

## **9.3 EPA Region 3**

9.3.1 The District of Columbia

- a. Additional requirements:
  - i. Compliance with District of Columbia Laws and Regulations. Discharges covered by the PGP must comply with the District of Columbia Water

Pollution Control Act of 1984, as amended, (D.C. Official Code § 8-103.01 *et seq.*) and its implementing regulations in Title 21, Chapters 11 and 19 of the District of Columbia Municipal Regulations. Nothing in this permit will be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to District of Columbia laws and regulations.

- ii. Submission of Notice of Intent and Notice of Termination. Copies of Notice of Intent and Notice of Termination shall be submitted to the District Department of the Environment (Department) at the same time they are submitted to EPA.
- iii. Submission of Pesticide Discharge Management Plan (PDMP). The Pesticide Discharge Management Plan (PDMP) shall be submitted to the Department for review and approval prior to submitting NOI to EPA to ensure compliance with the District of Columbia laws and regulations.
- iv. Pesticide Discharge Management Plan (PDMP) Modification. Any update or amendment of the PDMP shall be submitted to the Department within (7) days of its finalization.
- v. Submission of Corrective Action Plans. Copies of Corrective Action plans, reports, and documentations shall be submitted to the Department.
- vi. Authorization to Inspect. The permittee shall allow the Department to inspect any facilities, equipment, practices, or operations regulated or required under this permit and to access records maintained under the conditions of this permit.
- vii. Submission of Reports. Signed copies of all analytical data and reports required under this permit shall be submitted to the Department at the same time they are submitted to EPA.
- viii. Additional Information. If requested by the Department, the permittee is required to provide additional information necessary for a case-by-case eligibility determination to assure compliance with District of Columbia laws and regulations.
- ix. Where to Submit Information. All required or requested documents shall be sent to the:

District Department of the Environment  
Attention: Associate Director, Water Quality Division  
1200 First Street, N.E., 5th Floor  
Washington, DC 20002

#### 9.3.2 Federal Facilities in the State of Delaware

- a. No additional requirements

### **9.4 EPA Region 4**

#### 9.4.1 Indian Country lands within the State of Alabama

- a. No additional requirements

#### 9.4.2 Indian Country lands within the State of Florida

- a. No additional requirements
- 9.4.3 Indian Country lands within the State of Mississippi
  - a. No additional requirements
- 9.4.4. Indian Country lands within the State of North Carolina
  - a. No additional requirements

## **9.5 EPA Region 5**

- 9.5.1 Indian Country lands with the State of Michigan
  - a. No additional requirements
- 9.5.2 Indian Country lands within the State of Minnesota
  - a. Sokaogon Chippewa Community
    - i. Applications of pesticides within the Sokaogon Chippewa Community are not eligible for discharge coverage under this permit. Contact EPA Region 5 office for an individual permit application.
- 9.5.3 Indian Country lands within the State of Wisconsin
  - a. Bad River Band of Lake Superior Tribe of Chippewa Indians
    - i. Only those activities specifically authorized by the PGP are authorized by this Certification. This Certification does not authorized impact to cultural properties, or historical sites, or properties that may be eligible as such.
    - ii. An operator meeting the eligibility requirements listed in the PGP and planning to discharge any amount of pesticide within the exterior boundaries of the Bad River Reservation under the PGP must notify the Tribe prior to the discharge. This notification is required for all discharges under the PGP within the Bad River Reservation boundaries regardless if the operator is required to submit a Notice of Intent to the U.S. EPA. The operator shall provide information consistent with the NOI form applicable to the PFP, which can be obtained from the EPA's webpage: <http://cfpub.epa.gov/npdes>. Notification shall be sent to the following address:  
  
Bad River Tribe's Natural Resources Department  
P.O. Box 39  
Odanah, WI 54861
    - iii. An operator meeting the eligibility requirements listed in the PGP and required to submit a Notice of Intent (NOI) to obtain coverage under the PGP must submit a copy of the NOI to the Tribe at the same time it is submitted to the U.S. EPA. The operator must also submit a copy of the Notice of termination to the Tribe at the same time it is submitted to the U.S. EPA. Copies shall be sent to the following address:  
  
Bad River Tribe's Natural Resources Department  
P.O. Box 39  
Odanah, WI 54861
    - iv. An operator meeting the eligibility requirements listed in the PGP and planning to discharge any amount of pesticide within the exterior of the Bad

River Reservation under the PGP must prepare a Pesticide Discharge Management Plan. The operator must submit a copy of the PDMP to the following addresses prior to the discharge:

Bad River Tribe's Natural Resources Department  
P.O. Box 39  
Odanah, WI 54861

Bad River tribal Historic Preservation Office  
P.O. Box 39  
Odanah, WI 54861

- v. Discharges to wild rice waters will not be permitted 14 days prior to the anticipated opening of the Tribe's wild rice harvest season. Discharges will continue to be prohibited until the closing of the Tribe's wild rice harvest season. Question regarding the opening and closing of the wild rice harvest season can be directed to the Tribe's Natural Resources Department at (715) 682-7123.
- vi. The Tribe's CWA 401 Certification for the PGP will be reviewed and revised upon federal approval of the Tribe's water quality standards to ensure the activity authorized by the PGP will not violate tribal water quality standards.
- b. Lac du Flambeau Band of Lake Superior Chippewa Indians
  - i. Applications of pesticides within the Lac du Flambeau Reservation are not eligible for discharge coverage under this permit. Contact EPA Region 5 office for an individual permit application.
- c. Fond du Lac Reservation
  - i. Applications of pesticides within the Fond du Lac Reservation are not eligible for discharge coverage under this permit. Contact EPA Region 5 office for an individual permit application.
- d. Grand Portage Band of Lake Superior Chippewa
  - i. Only those activities specifically authorized by the General Permit are authorized by this Certification. This Certification does not authorize impacts to cultural properties, or historical sites, or properties that may be eligible for listing as such.
  - ii. All pesticide application discharges authorized by the General Permit must comply with the Grand Portage Water Quality Standards, the Water Resources Ordinance, and Applicable Federal Standards (as defined in the Water Resources Ordinance). As such, appropriate steps must be taken to ensure that biological and chemical pollutants associated with pesticide applications are prevented from entering Waters of the Reservation. All spills must be reported to the appropriate emergency-management agency, and measures must be taken to prevent the pollution of Waters of the Reservation, including groundwater.
  - iii. A copy of the Pesticide Discharge Management Plan (the "Plan") required by the General Permit must be submitted to the Board at least 30 days in advance of sending the requisite Notice of Intent to EPA. The Board may require

monitoring of pesticide application discharges as determined on a case-by-case basis. If the Board determines that a monitoring plan is necessary, the monitoring plan must be prepared and incorporated into the Plan before the Notice of Intent is submitted to the EPA. The Plan should be sent to:

Grand Portage Environmental Resources Board  
P.O. Box 428  
Grand Portage, MN 55605

- iv. Copies of the Notice of Intent and Notice of Termination required under the General Permit must be submitted to the Board at the address above at the same time they are submitted to the EPA.
- v. If requested by the Grand Portage Environmental Department, the permittee must provide additional information necessary for a case-by-case eligibility determination to assure compliance with the Grand Portage Water Quality Standards and any Applicable Federal Standards.
- vi. Discharges that the Board has determined to be or that may reasonably be expected to be contributing to a violation of Grand Portage Water Quality Standards or Applicable Federal Standards are not authorized by this certification.
- vii. The Board retains full authority provided by the Water Resources Ordinance to ensure compliance with and to enforce the provisions of the Water Resource Ordinance, the Grand Portage Water Quality Standards, Applicable Federal Standards, and these certification conditions.
- viii. Appeals related to Board actions taken in accordance with any of the preceding conditions may be heard by the Grand Portage Tribal Court.
- ix. As provided by the Water Resources Ordinance, any interested party may request that a public hearing be scheduled regarding the Board's decision to grant conditional certification of the 2011 General Permit. Such a request must be directed to the following address within 30 days of this notice:

Grand Portage Environmental Resources Board  
P.O. Box 428  
Grand Portage, MN 55605

## **9.6 EPA Region 6**

- 9.6.1 Indian Country lands within the State of Louisiana
  - a. No additional requirements
- 9.6.2 The State of New Mexico except Indian Country Lands
  - a. No additional requirements
- 9.6.3 Indian Country lands within the State of New Mexico, except Navajo Reservation Lands (See Region 9) and Ute Mountain Reservation Lands (See Region 8)
  - a. Ohkay Owingeh

- i. Ohkay Owingeh Office of Environmental Affairs must be provided with a copy of the Notice of Intent (NOI), and Notice of Termination (NOT) at the same time it is submitted to the U.S. EPA.

Ohkay Owingeh Office of Environmental Affairs  
P.O. Box 717  
Ohkay Owingeh, NM 87566  
505-852-4212 Tel  
505-852-1432 Fax
  - ii. A copy of the proposed action (project plan) must be provided to the tribe upon their request.
- b. Pueblo of Isleta
- i. Copies of all Notifications, associated analytical data, and written reports for actions covered under this permit occurring on Pueblo of Isleta lands or within five river miles of the northern exterior boundary of Pueblo of Isleta lands shall be provided to the Pueblo of Isleta Governor's Office and the Pueblo of Isleta Department of Natural Resources at same time they are provided to the U.S. Environmental Protection Agency. Any correspondence between applicant and EPA related to corrective action, enforcement, monitoring, or adverse incident written reports should likewise be routed to the Pueblo of Isleta Governor's Office and Pueblo of Isleta Natural Resources Department. All requested materials shall be sent to: Honorable Frank E. Lujan, Governor, Pueblo of Isleta, P.O. Box 1270, Isleta, NM 87022 and Pueblo of Isleta Department of Natural Resources, same address.
- c. Pueblo of Sandia
- i. Copies of all Notices of Intent (NOI) submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address. Discharges are not authorized by this permit unless an accurate and complete NOI has been submitted to the Pueblo of Sandia

Regular U.S. Delivery Mail:  
Pueblo of Sandia Environment Department  
Attention: Water Quality Manager  
481 Sandia Loop  
Bernalillo, NM 87004
  - ii. The Pesticide Discharge Management Plan (PDMP) must be available to the Pueblo of Sandia Environment wither electronically or hard copy upon request for review. The PDMP must be made available at least ten (10) days before pesticide application begins. The ten (10) day period will give tribal staff time to become familiar with the project site, prepare for pesticide inspections, and determine compliance with the Pueblo of Sandia Water Quality Standards. Failure to provide a PDMP to the Pueblo of Sandia may result in denial of the pesticide application or pesticide application delay.
  - iii. An "Authorization to Proceed Letter" with site specific mitigation requirements will be sent out to the permittee when a review of the OI and SWPPP is completed by the Pueblo of Sandia Environment Department. This

approval will allow the construction to proceed if all applicable requirements are met.

- iv. Before submitting a Notice of Termination (NOT) to the EPA, permittees must clearly demonstrate to the Pueblo of Sandia Environment Department through a site visit or documentation that requirements from Section 1.2.5.2 have been met. A short letter stating the NOT is acceptable and all requirements have been met will be sent to the permittee to add to the permittee's NOT submission to EPA.
- v. Copies of all NOT submitted to the EPA must also be sent concurrently to the Pueblo of Sandia at the following address.

Regular U.S. Delivery Mail:  
Pueblo of Sandia Environment Department  
Attention: Water Quality Manager  
481 Sandia Loop  
Bernalillo, NM 87004

d. Taos Pueblo

- i. Copies of all Notifications, associated analytical data, and written reports for actions covered under this permit occurring on Taos Pueblo lands shall be provided to the Taos Pueblo Governor's Office as well as the Taos Pueblo Environmental Office at the same time they are provided to the U.S. EPA.
- ii. Any correspondence between applicant and EPA related to corrective action, enforcement, monitoring, or adverse incident written reports should likewise be routed to Taos Pueblo
- iii. All requested material shall be sent to:

Taos Pueblo Governor's Office  
P.O. Box 1846  
Taos, NM 87571

Taos Pueblo Environmental Office  
P.O. Box 1846  
Taos, NM 87571

9.6.4 The State of Oklahoma, except Indian Country lands

- a. In accordance with Oklahoma's Water Quality Standards (OAC 785:45-5-25, OAC 785:46-13-4, and OAC 785:46-13-5), certification of the PGP is denied for specified discharges to the following areas:
  - i. New discharges to any waterbody designated Scenic River or Outstanding Resource Waters (ORW) in Oklahoma's Water Quality Standards and all waters of the state located within their watersheds. Existing discharges as of June 11, 1989 are allowed provided there is no increased load of any pollutant discharged. Permittees that are existing dischargers must document their eligibility as an existing discharger and how they will comply with the no increased loading restriction. Prior to seeking coverage under the permit, this documentation must be submitted to the Oklahoma Department of Agriculture, Food and Forestry (ODAFF) for a determination that the

discharge is eligible for coverage. This documentation and the ODAFF determination shall be maintained with the other records required to be kept by Part 7.0 of the permit and the Oklahoma Combined Pesticide Law, 2 O.S. § 3-83 and shall be available upon request to State and Federal inspectors. If the PGP requires the discharger to submit a Notice of Intent (NOI), a copy of the ODAFF determination shall be submitted with the NOI.

- ii. New discharges to any waterbody or watershed designated High Quality Water (HQW) or Sensitive Public and Private Water Supply (SWS) in Oklahoma's Water Quality Standards. Provided, new discharges to Tier 2 Areas are allowed in those circumstances where the discharger demonstrated that the discharge will result in the maintaining or improving water quality. Permittees must document their eligibility and demonstrate how their new discharge will maintain or improve water quality. Prior to seeking coverage under the permit, this documentation must be submitted to the Oklahoma Department of Agriculture, Food and Forestry (ODAFF) for a determination that the discharge is eligible for coverage. This documentation and the ODAFF determination shall be maintained with the other records required to be kept by Part 7.0 of the permit and the Oklahoma Combined Pesticide Law, 2 O.S. § 3-83 and shall be available upon request to State and Federal inspectors. If the PGP requires the discharger to submit a Notice of Intent (NOI), a copy of the ODAFF determination shall be submitted with the NOI. Existing discharges in Tier 2 Areas as of June 11, 1989 are allowed. Permittees that are existing dischargers must document their eligibility as an existing discharger. Prior to seeking coverage under the permit, this documentation must be submitted to the Oklahoma Department of Agriculture, Food and Forestry (ODAFF) for a determination that the discharge is eligible for coverage. This documentation and the ODAFF determination shall be maintained with the other records required to be kept by Part 7.0 of the permit and the Oklahoma Combined Pesticide Law, 2 O.S. § 3-83 and shall be available upon request to State and Federal inspectors. If the PGP requires the discharger to submit a Notice of Intent (NOI), a copy of the ODAFF determination shall be submitted with the NOI.
- iii. New discharges or increased pollutant loading from existing discharges as of June 11, 1989 to any waterbody located within the boundaries of an area listed in Table 1 of Appendix B in Oklahoma's Water Quality Standards are allowed only under such conditions that ensure that the recreational and ecological significance of these waters will be maintained. Permittees must document their eligibility. Permittees that are new dischargers or existing dischargers proposing an increased pollutant loading must demonstrate how their new discharge or increased pollutant loading will ensure that the recreational and ecological significance of these waters will be maintained. Permittees that are existing dischargers must document their eligibility as an existing discharger. Prior to seeking coverage under the permit, this documentation must be submitted to the Oklahoma Department of Agriculture, Food and Forestry (ODAFF) for a determination that the discharge is eligible for coverage. This documentation and the ODAFF determination shall be maintained with the



other records required to be kept by Part 7.0 of the permit and the Oklahoma Combined Pesticide Law, 2 O.S. § 3-83 and shall be available upon request to State and Federal inspectors. If the PGP requires the discharger to submit a Notice of Intent (NOI), a copy of the ODAFF determination shall be submitted with the NOI.

- iv. This certification applies only to pesticide application activities required to be permitted by the PGP. Terrestrial applications of pesticides, even within Tier 2 or Tier 3 Areas (watersheds), are not affected by this permit or certification.

9.6.5 Indian Country lands within the State of Oklahoma

- a. No additional restrictions

9.6.6 Discharges in the State of Texas that are not under the authority of the Texas Commission on Environmental (formerly TNRCC), including activities associated with the exploration, development, or production of oil or gas or geothermal resources, including transportation of crude oil or natural gas by pipeline, except Indian Country lands

- a. No additional restrictions

9.6.7 Indian Country lands within the State of Texas

- a. No additional restrictions

## **9.7 EPA Region 7**

9.7.1 Indian Country lands within the State of Iowa

- a. No additional restrictions

9.7.2 Indian Country lands within the State of Kansas

- a. No additional restrictions

9.7.3 Indian Country lands within the State of Nebraska, except Pine Ridge Reservation lands

(See Region 8)

- a. No additional restrictions

## **9.8 EPA Region 8**

9.8.1 Federal Facilities in the State of Colorado, except those located on Indian Country Lands

- a. No additional restrictions

9.8.2. Indian Country lands within the State of Colorado, as well as the portion of the Ute Mountain Reservation located in New Mexico

- a. Ute Mountain Ute Tribe
  - i. Operators seeking to apply pesticides that could result in discharges to Tier 3 waters of the Tribe must apply for individual NPDES permit from the EPA.

9.8.3. Indian Country lands within the State of Montana

- a. The Confederated Salish and Kootenai Tribes
  - i. Operators must follow conditions found in the Integrated Noxious Weed Management Plan and Amendments (Plan, CSKT 1993 b), the 2000 Forest

Management Plan, and recent NEPA documents for conducting herbicide applications. The conditions listed below must be included in the contract specific provisions or by a standard design practice.

1. Pesticides would be used to the water's edge only when the product's label allows such use
2. When runoff potential is high, applicator would stay at least 10 feet from the edge of a natural break (ridge top) that leads into wetland or riparian areas.
3. Applications within 50 feet of sensitive surface water would occur when wind speed is >10mph.
4. Drift reducing additives would be used when working within 50 feet of open-water and wetland/riparian areas.
5. Pesticide mixing and loading would take place at least 500 feet from sensitive surface and ground-water areas unless spill containment devices (absorbant mats) are used and an anti back-siphoning device is used when drafting water.
6. Work would conform to the CSKT Best Management Practices (CSKT 2000, from the Forest Management Plan).
7. Only pesticides labeled for aquatic use would be applied near water bodies.
8. Tordon would not be applied in riparian zones.
9. All spray equipment would be calibrated in advance to help avoid contamination of surface and ground water sources.

- ii. The Operator must submit to the Tribal NRD a copy of the completed contract 30 days prior to the application start date.

9.8.4 Indian Country lands within the State of North Dakota

- a. No additional restrictions

9.8.5 Indian Country lands within the State of South Dakota, as well as the portion of the pine Ridge Reservation located in Nebraska (see Region 7)

- a. No additional restrictions

9.8.6 Indian Country lands within the State of Utah, except Goshute and Navajo Reservation lands (see Region 9)

- a. No additional restrictions

9.8.7 Indian Country lands within the State of Wyoming

- a. No additional restrictions

## **9.9 EPA Region 9**

9.9.1 The Island of American Samoa

- a. Operator must meet the American Samoa Water Quality Standards

9.9.2 Indian Country lands within the State of Arizona, as well as Navajo reservation lands in New Mexico (See Region 6) and Utah (See Region 8)

- a. Hopi Tribe
  - i. No additional restrictions.
- b. Hualapai Reservation
  - i. Applications of pesticides within the Hualapai Reservation are not eligible for discharge coverage under this permit. Contact EPA Region 9 office for an individual permit application.
- c. Navajo Nation
  - i. Operators must submit copies of the Notice of Intent (NOI) to the Navajo Nation Environmental Protection Agency for applications located on Navajo lands.

Navajo Nation Environmental Protection Agency  
Surface & Ground Water Protection Department  
P.O. Box 339  
Window Rock, AZ 86515
  - ii. Applications located on Navajo lands and covered under the PGP will be subject to compliance inspections by Navajo EPA staff with active Federal Inspector Credentials under the authority of the Clean Water Act.
- d. White Mountain Apache Tribe
  - i. Any pesticide application to be made under the PGP must also be made in accordance with a Tribal Pesticides Use Permit, to be filed with the White Mountain Apache Tribe Hydrology & Water Resources Program in accordance with 33 USC 1341 (d).

#### 9.9.3 Indian Country lands within the State of California

- a. Big Pine Paiute Tribe of the Owens Valley
  - i. No additional restrictions
- b. Bishop Paiute Tribe
  - i. Pursuant to the *Bishop Paiute Tribe's Water Quality Control Plan, Updated August 2008*, "Pesticide concentration, individually, or collectively, shall not exceed the lowest detectable level, using the most recent detection procedures available. There shall not be an increase in pesticide concentrations found in bottom sediments. There shall be no detectable increase in bioaccumulation of pesticides in aquatic life."
  - ii. Tribe must be notified of any adverse incidents and provided copies of adverse incident reports and corrective action documentation.
  - iii. Copies of Notice of Intent for proposed PGP discharges affecting Bishop Paiute Tribe water shall be submitted to the Environmental Management Office for review and comment by the TEPA Board.
  - iv. Copies of Pesticide Discharge Management Plan shall be provided to the Environmental Management Office for review and comment by the TEPA Board.

- v. Copies of Notice of Termination for proposed PGP discharges affecting Bishop Paiute Tribe waters shall be submitted to the Environmental Management Office for review by the TEPA Board.
- vi. Any substantive changes in the National Pollutant Discharge Elimination System permit that may affect water quality shall require immediate notification of the Environmental Management Office.
- vii. Environmental Management Office shall be informed of when activities covered under the PGP will occur and allowed to observe the pesticide application activities affecting Bishop Paiute Tribe waters.

#### 9.9.4 The Island of Guam

- a. Operator must comply with the following conditions
  - i. Certification is not provided for applications using aircraft pesticide spraying (22-GAR-Division 3 Section 15702 (c) over the Northern Aquifer to prevent or minimize ground water contamination to Guam's Sole Source Aquifer with its existing beneficial use as drinking water. Application of pesticides from aircraft to waters that are subject to NPDES permitting requirements would require authorization through NPDES permitting method other than the PGP. The ground water drinking source shall be protected in accordance with the Guam Water Quality Standards 2001 Revision 22 GAR 2 Section 5102 (b) (1) (2) for Category G-1 Zone Resource Zone and 2) Category G-2 Recharge Zone and Guam Water Resources and Operating Regulations (22 GAR 2 Section 7130 on Well head Protection Program).
  - ii. Person(s) who apply general use pesticides as a primary part of their or duties shall be required to meet specific training requirements, as set forth in the regulations. Anyone who applies pesticides on Guam as part of their work (i.e., who responsibly expect to be paid for their service) must complete a Core training, pass the exam and obtain IF from the Guam Environmental Protection Agency, regardless is the pesticide is an over-the-counter Pesticide or a Restricted Use Pesticide ( PL-30-197-Pesticide Act- (d)) and obtain certification from Guam Environmental Protection Agency for every person who applies restricted pesticides (PL-29-26- Pesticide Act 50107).
  - iii. Discharges of any pesticide applied to a surface water drinking source such as Fena Reservoir, Ugum and its tributaries up-stream from the surface drinking waters are ineligible for coverage under the PGP and would require coverage under an alternative NPDES permit from USEPA. Such discharges shall adhere to the Safe Drinking Water Act and Safe Drinking Water Regulations (10 GCA, Div. 2, chapter 53 Safe Drinking Water Act).
  - iv. The Pesticide General Permit (PGP) shall adhere to limitations listed (Guam Water Quality Standards 2001 Revisions, Appendix A Priority Toxic Pollutants, II Aquatic Life Criteria Toxic Pollutants and III Numerical Criteria for Priority Toxic Pollutants) or federal toxic pollutants thresholds concentration.
  - v. The Pesticide General Permit must set appropriate measures and conditions to protect Guam's threatened and Endangered Species and Outstanding Resource Waters of exceptional recreational or ecological significance as determined by

the Guam EPA Administrator (Guam Water Quality Standards 2001 Revisions, Section 5102 Categories of Waters, D. Outstanding Resource Waters). Visual surveys and consultation with Division of Aquatic and Wildlife Resources on locally threaten and Endangered Species shall be required.

- vi. Alternate values shall apply in Guam for the limitation on coverage listed in Part 1.2.2 Table 9-1 of the PGP, “Annual Treatment Area Thresholds” as follows:

**Table 9-1. Annual Treatment Area Thresholds**

PGP Part	Pesticide Use	Annual threshold
2.2.1	Mosquitoes and Other Flying Insect Pests	5 acres of treatment area
2.2.2	Aquatic Weed and Algae	
	• In Water	2 acres of treatment area
	• At Water’s Edge	1 linear mile of treatment area at water’s edge
2.2.3	Aquatic Nuisance Animal Control	
	• In Water	5 acres of treatment area
	• At Water’s Edge	1 linear mile of treatment area at water’s edge
2.2.4	Forest Canopy Pest Control	2 acres of treatment

#### 9.9.5 Commonwealth of the Northern Mariana Islands

- a. No additional restrictions

#### 9.9.6 Indian Country lands within the State of Nevada, as well as the Duck Valley reservation in Idaho, the Fort McDermitt Reservation in Oregon (See Region 10) and the Goshute Reservation in Utah (See Region 8)

- a. Pyramid Lake Paiute Tribe
  - i. No additional restrictions

### 9.10 EPA Region 10

#### 9.10.1 The State of Alaska, except Indian Country lands

- a. Additional restrictions:
  - i. The Alaska Water Quality Standards in 18 AAC 70.020 define residues in fresh and marine waters as “floating solids, debris, sludge, deposits, foam, scum, or other residues.”
  - ii. The annual treatment thresholds requiring submission of a Notice of Intent (NOI) should be modified for Alaska (Table 9-2) as follows:
  - iii. Provide a copy of the Notice of Intent (NOI) for those authorizations required in Alaska to Alaska Department of Environmental Conservation at the following address:

Alaska Department of Environmental Conservation  
Wastewater Discharge Authorization Program  
Pesticide NOI

555 Cordova Street  
Anchorage, AK 99501

Or via email with pdf to: [dec-wqreporting@alaska.gov](mailto:dec-wqreporting@alaska.gov)

**Table 9-2. Annual Treatment Area Thresholds for Alaska**

PGP Part	Pesticide Use	Annual threshold
2.2.1	Mosquitoes and Other Flying Insect Pests	6400 acres of treatment area
2.2.2	Aquatic Weed and Algae	
	• In Water	80 acres of treatment area
	• At Water's Edge	20 linear mile of treatment area at water's edge
2.2.3	Aquatic Nuisance Animal Control	
	• In Water	80 acres of treatment area
	• At Water's Edge	20 linear mile of treatment area at water's edge
2.2.4	Forest Canopy Pest Control	6400 acres of treatment

#### 9.10.2 Indian Country lands within the State of Alaska

- a. No additional conditions.

#### 9.10.3 The State of Idaho, except Indian Country lands

- a. Conditions Applicable to All Pesticide Use Patterns:
  - i. In the event of an unauthorized release of hazardous materials to waters of the U.S. that requires reporting in accordance with Part 6.5.1 of the Draft PGP, then the Operator shall: 1) stop the spill; 2) contain the spilled material; 3) call 911; and 4) collect, remove, and properly dispose of the material (IDAPA 58.01.02.850). Some pesticides may be considered hazardous materials, and it is the Operator's responsibility to know whether the chemical pesticide(s) being used are considered a hazardous material.
- b. Conditions Applicable to Applications of Aquatic, Chemical Pesticides for Purposes of Controlling Pests in Navigable Waters of the U.S.:
  - i. If application is directly into navigable waters subject to the jurisdiction of the CWA (waters of the U.S.) that contain public drinking water systems (PDWS) surface water intake(s) the Operator must notify (See Condition # 6) the appropriate DEQ Regional Office Administrator as well as the PDWS operator(s)/owner(s) at least seven (7) days prior to the application if:
    - the pesticide contains at least one of the following chemicals: endosulfan, diquat, 2,4-D, or glyphosate; and
    - the targeted pest control area is within 600 feet of the intake or within the distance restrictions (associated with domestic use) specified on the label, whichever distance is greater. The targeted pest control area is that area within the waters of the U.S. where

the aquatic, chemical pesticide is expected to perform its intended purpose.

This notification requirement also applies to applications into jurisdictional tributaries of waters of the U.S. with PDWS intake(s) if the application falls within the distance specified above. Waters of the U.S. with PDWS intake(s) are listed in Table 9-3. Contact information for the DEQ Regional Office Administrators can be obtained at:

[http://www.deq.idaho.gov/about/office\\_locations.cfm](http://www.deq.idaho.gov/about/office_locations.cfm).

**Table 9-3a. Idaho water bodies with public water supply intakes**

County	Stream Name	Segment boundaries
Ada	Boise River	Diversion Dam to Eagle Island
Benewah	Adams Creek	Headwaters to St. Maries River
	Rochat Creek	Headwaters to St. Joe River
Boise	Bogus Creek	Headwaters to Shafer Creek
	Elk Creek	Ross Fork to Mores Creek
	Mores Creek	Grimes Creek to Lucky Peak Reservoir
	Payette River	Confluence of NF and SF Payette River to Black canyon Reservoir
	Payette River MF	Big Bulldog Creek to SF Payette River
	Warm Springs Creek	Headwaters to MF Payette River
Bonner	Berry Creek	Headwaters to Colburn Creek
	Little Sand Creek	Headwaters to Sand Creek
	Pend Oreille Lake	Clark Fork River inflow to Rocky Point (eastern and northern portions of the lake)
	Pend Oreille River	Pend Oreille Lake to Albeni falls Dam
	Sand Creek	Headwaters to Pend Oreille Lake
	Strong Creek	Headwaters to Pend Oreille Lake
Boundary	Brown Creek	Headwaters to Twentymile Creek
	Kootenai River	Moyie River to Deep Creek
	Meadow Creek	Headwaters Moyie river
	Myrtle Creek	Jim Creek to Kootenai river
	Skin Creek	Headwaters to Moyie River
	Twenty Mile Creek	Headwaters to Brown Creek
Clearwater	Canal Gulch Creek	Headwaters to Orofino Creek
	Clearwater River	Lolo Creek to NF Clearwater River
Clearwater	Dworshak Reservoir	Three Meadow Group Campground to Freeman Creek (western portion of lake)
	Dworshak reservoir	Big Eddy Recreation Site to dam
	Elk Creek	Headwaters to Elk Creek Reservoir
	Orofino Creek	Headwaters to Clearwater River

County	Stream Name	Segment boundaries
Custer	Garden Creek	Headwaters to Salmon River
Elmore	Montezuma Creek EF	Headwaters to MF Boise river
	Snake River	Clover Creek to Browns Creek
Idaho	Elk Creek	Confluence of Big Elk and Little Elk Creeks to American River
	Clearwater River	Confluence of SF and MF Clearwater River to Lolo Creek
	Wall Creek	Headwaters to Sally Ann Creek
Kootenai	Coeur d' Alene Lake	Carlin Bay to Gond Bay (eastern side of lake) Rock Point to Stevens Point (western side of lake) Wolf Lodge Bay to Coeur d' Alene (northern side of lake)
	Hayden Lake	Hayden Creek to Jim Creek
Latah	Big Meadow Creek	Headwaters to WF Little Bear Creek
	Potlatch river	Big Bear Creek to Clearwater River
Lemhi	Jessie Creek	Headwaters to Salmon River
	Pollard Creek	Headwaters to Salmon river
	Salmon River	Williams Creek to Pollard Creek
	Chippis Creek	Headwaters to Pollard Creek
Nez Perce	Big Canyon Creek	Headwaters to Clearwater river
	Clearwater River	Lower Granite Dam Pool
Payette	Payette river	Black Canyon Reservoir to Snake river
Shoshone	Boulder Creek	Headwaters to SF Coeur d'Alene River
	Deadman Creek	Headwaters to SF Coeur d'Alene River
	Lake Creek	Headwaters to SF Coeur d'Alene River
	Mill Creek	Headwaters to SF Coeur d'Alene River
	Placer Creek	Headwaters to SF Coeur d'Alene River
	Canyon Creek	Headwaters to SF Coeur d'Alene River
Valley	Boulder Creek	Headwaters to EF SF Salmon River
Valley	Payette Lake	Ponderosa Park to outlet at NF Payette River outlet Shellworth island to Cougar Island
Washington	Snake river	Boise River to Weiser river
	Weiser River	Keithly Creek to Snake River



- ii. If a chemical pesticide containing endothall, diquat, glyphosate, or 2,4-D is applied directly into waters of the U.S. within the distance outlined in Condition #1 of this subsection, then the Operator shall conduct water quality monitoring as follows:
- A. Water quality monitoring shall be specific to the pesticide applied.
  - B. Water quality monitoring shall be conducted at the downstream edge of the targeted pest control area or at the PDWS intake, whichever location is agreed upon by DEQ and the PDWS operator(s)/owner(s).
  - C. Water quality monitoring shall begin at least within 3 days of the pesticide application, unless an alternative waiting period is specified by DEQ.
  - D. Water quality monitoring shall be conducted at least weekly following the initial day of treatment or at an alternative frequency that is specified by DEQ.
  - E. Water sampled shall be analyzed at a laboratory that is certified for drinking water analyses  
([http://www.deq.idaho.gov/water/assist\\_business/pws/labs\\_certified.xlsx](http://www.deq.idaho.gov/water/assist_business/pws/labs_certified.xlsx)).
  - F. Water quality monitoring shall continue until chemical residues fall below the maximum contaminant levels in Table 9-3b.

**Table 9-3b. Maximum Contaminant Levels**

Chemical	Maximum Contaminant Level (ug/L)
Diquat	20
Endothall	100
Glyphosate	700
2,4-D	70

- G. Water quality monitoring results shall be summarized and sent to the appropriate DEQ Regional Office Administrator.
- iii. If the application is directly into waters of the U.S. subject to appropriation under the laws of the State of Idaho, the Operator shall provide advanced notice to owners of water rights and water permits for domestic and agricultural use that are on record with the Idaho Department of water Resources and that have an authorized point of diversion located within the distance specified in Condition (i) of this subsection. No notice is required to owners of diversions that are located upstream from a pesticide application. Information about water right or water permit owners may be obtained at:  
<http://www.idwr.idaho.gov/apps/ExtSearch/SearchWRAJ.asp>.

Seasonal or annual notifications will fulfill the advanced notice requirement of this condition. Notification may be achieved by a variety of methods, including but not limited to: email, posting on a web page, billing notice, letter, news release, or door hanger. The notification shall contain the information specified in Condition (vi) of this subsection.

- iv. If an application is into waters of the U.S. that may be used for recreational activities, then the Operator shall post notices at boat launches and public swimming beaches. The Operator shall follow the FIFRA instructions, where applicable, for posting requirements. If the FIFRA label does not have specific requirements for posting notices, then the Operator shall comply with the following:
  - A. The notice shall be placed at location(s) accessible by the public (e.g. docks or information kiosks) and the extent of posting shall be limited to the target pest control area.
  - B. The notice shall be posted prior to treatment.
  - C. The notice shall indicate the date(s) of application, the product used, the purpose of the application, any water use restrictions, and Operator phone number.
  - D. The notice shall be removed within 2-weeks after the pest control project has been completed.

Operators are not required to post notice for applications to canals or drainage delivery systems that were constructed for the sole purpose of water conveyance.

- v. For applications of chemical pesticides (e.g. Rotenone or Antimycin A) to waters of the U.S. for the sole purpose of eradicating aquatic mollusks or vertebrate animals, the Operator must notify (see Condition (vi) of this subsection) the appropriate DEQ Regional Office Administrator at least 7 days prior to the application.
- vi. When notifications are required, they must include the following information: Operator name and telephone number; general location of the targeted pest control area and anticipated schedule of application(s); pesticide that will be used; and any water use restrictions associated with the pesticide labeling information. Notifications to the DEQ Regional Office Administrator shall be in writing and may be submitted via email, hand delivery, or ground mail.
- vii. These conditions shall not apply to Operators applying pesticides to man-made waterways (as defined in section 010.51 of the Idaho WQS) which they own, operate or maintain for irrigation water delivery or drainage purposes.

9.10.4 Indian Country lands within the State of Idaho, except Duck Valley Reservation lands (See Region 9)

- a. No additional restrictions

9.10.5 Indian County lands within the State of Oregon, except Fort McDermitt Reservation lands (See Region 9)

- a. Confederated Tribes of The Warm Springs Reservation of Oregon

- i. Limitations on Coverage

*Discharges to Water Quality Impaired Waters.* You are not eligible for coverage under this permit for any discharges from a pesticide application to waters of the Warm Springs Reservation if the water is identified as impaired by that pesticide or its degradates. For purposes of this permit, impaired waters are those that have been identified by EPA pursuant to Section 303(d) of the CWA or by the Warm Springs Tribe as not meeting applicable Tribal water quality standards. Impaired waters for the purposes of this certification include both waters with EPA-approved or EPA-established Total Maximum Daily Loads (TMDLs) and waters for which EPA has not yet approved or established a TMDL.

*Discharges to Waters Designated as Tier 3 for Antidegradation Purposes.* Certification for discharges from a pesticide application to waters designated by the Warm Springs Tribes or EPA as Tier 3 (Outstanding National Resource Waters) for anti-degradation purposes under 40 CFR 131.12(a)(3) and Tribal Ordinances 80 and 81 is not contemplated in this document.

- ii. Authorization to Discharge Under the PGP Permit

To obtain authorization under this permit, an operator must:

- A. Meet the eligibility requirements identified in EPA PGP and
    - B. Meet any Tribal restrictions required by Warm Springs Tribal Ordinance 74, 80 and 81.

If you are an operator identified in PGP Part 1.2.2, submit a complete and accurate Notice of Intent (NOI) to EPA and the Warm Springs Tribe.

If you apply pesticides that result in a discharge and know or reasonably should have known that those activities will exceed one or more of the pesticide application annual (i.e., calendar year) treatment area thresholds listed in Table 9-4 below for the “treatment area,” as defined in PGP Appendix A.

**Table 9-4. Annual Treatment Area Thresholds**

<b>Pesticide Use</b>	<b>Annual Threshold</b>
Mosquitoes and Other Flying Insect Pests	640 acres of treatment area
Aquatic Weed and Algae Control:	
-In Water	20 acres of treatment area <sup>1</sup>
- At Water's Edge:	20 linear miles of treatment area at water's edge <sup>2</sup>
Aquatic Nuisance Animal Control:	
-In Water	20 acres of treatment area <sup>1</sup>
- At Water's Edge	20 linear miles of treatment area at water's edge <sup>2</sup>
Forest Canopy Pest Control	640 acres of treatment area

1 Calculations should include the area of the applications made to: (1) waters of the Warm Springs Reservation and (2) conveyances with a hydrologic surface connection to waters of the Warm Springs Reservation. At the time of pesticide application. For calculating annual treatment area totals, count each pesticide application activity as a separate activity. For example, applying pesticides twice a year to a ten acre site should be counted as twenty acres of treatment area.

2 Calculations should include the linear extent of the application made at water's edge adjacent to: (1) waters of the Warm Springs Reservation and (2) conveyances with a hydrologic surface connection to waters of the Warm Springs Reservation at the time of pesticide application. For calculating annual treatment totals, count each pesticide application activity and each side of a linear water body as a separate activity or area. For example, treating both sides of a ten mile ditch is equal to twenty miles of water treatment area.

### iii. Discharge Authorization Date

Beginning October 31, 2011, you must be covered under an NPDES permit for discharges to waters of the United States and specifically to the waters of the Warm Springs Reservation as a result of the application of a pesticide. Operators are authorized to discharge under this permit consistent with Table 9-5 below.

**Table 9-5. Discharge Authorization Date**

<b>Category</b>	<b>NOI Submittal Deadline</b>	<b>Discharge Authorization Date</b>
Operators not required to submit an NOI to EPA.	Not applicable.	Immediately after approval is obtained from Warm Springs Tribes.
Operators who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold identified in PGP Part 1.2.2 for that year.	At least 10 days prior to commencement of discharge.	No earlier than 10 days after EPA posts on the Internet receipt of your complete and accurate NOI. Approval of project must be obtained from the Warm Springs Tribes before commencement of any project.
Operators who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold identified in PGP Part 1.2.2 for that year.	At least 10 days prior to exceeding an annual treatment area threshold.	Original authorization terminates when annual treatment area threshold is exceeded. Operator is reauthorized no earlier than 10 days after EPA posts on the Internet receipt of your complete and accurate NOI. Approval of project must be obtained from the Warm Springs Tribes before commencement of any project.
Operators commencing discharge in response to a declared pest emergency situation as defined in Appendix A.	No later than 30 days after commencement of discharge. <sup>1</sup>	Immediately, for activities conducted in response to declared pest emergency situation. Approval of project must be obtained from the Warm Springs Tribes before commencement of any project.

<sup>1</sup> In the event that a discharge occurs prior to your submitting an NOI, you must comply with all other requirements of the PGP immediately.

Based on a review of the NOI EPA may delay authorization for further review, or may determine that additional technology based and/or water quality based effluent limitations are necessary, or may deny coverage under the PGP and require submission of an application for an individual NPDES permit as detailed in PGP Part 1.3. In this event, EPA will notify the Warm Springs Tribes of their decision and consult with the Tribes on any individual NPDES permit proposed to be issued for the Warm Springs Reservation.

iv. Continuation of this Permit

If this PGP is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with 40 CFR 122.6 and remain in force and effect.

**Terminating Coverage.** To terminate permit coverage, an operator who is required to submit an NOI as identified in PGP Part 1.2.2, must submit a complete and accurate Notice of Termination to EPA and the Warm Springs Tribes.

v. EPA Requiring Coverage Under an Alternative Permit

EPA may require you to apply for and/or obtain authorization to discharge under either an individual NPDES permit or an alternative NPDES general permit in accordance with 40 CFR 122.64 and 124.5. In this event, EPA will notify the Warm Springs Tribes of their decision and consult with the Tribes on any individual NPDES permit proposed to be issued for the Warm Springs Reservation.

vi. Operator Requesting Coverage under an Alternative Permit

If you do not want to be covered by this general permit, but need permit coverage, you can apply for an individual permit. In such a case, you must submit an individual permit application in accordance with the requirements of 40 CFR 122.261(i)(ii), with reasons supporting the request, to EPA. In this event, EPA will notify the Warm Springs Tribes of operator's decision and consult with the Tribes on any individual NPDES permit proposed to be issued for the Warm Springs Reservation.

vii. Other Federal and State and Tribal Laws

*All applicants must comply with Warm Springs Tribes Ordinances 45, 74, 80 and 81 & Tribal Code Chapters 433 and 479. In addition, they must comply with all other applicable federal state and Tribal laws and regulations that pertain to application of pesticides. For example, this permit does not negate the requirements under FIFRA and its implementing regulations to use registered pesticides consistent with the product's labeling. Additionally, there are other laws and regulations that may apply to certain activities that are also covered under this permit (e.g., United States Coast Guard regulations).*

viii. Federally-Listed Endangered and Threatened Species and Designated Critical Habitat Additional Requirements to Protect Listed Species and Critical Habitat.

[Procedures to assist in protecting listed species and critical habitat are currently being considered by EPA in consultation with the National Marine Fisheries Service (NMFS) and the U.S. Fish and Wildlife Service (FWS) under section 7 of the ESA. Additional discussion of the nature of permit conditions being discussed for incorporation into the final permit is provided in Part III.10.F of the permit fact sheet.]

In the event NMFS or FWS determine that they would require additional measures to protect listed species and/or critical habitat, EPA will notify the Warm Springs Tribes of this decision and consult with the Tribes on a “government to government” basis regarding any measures proposed to be issued for the Warm Springs Reservation.

Tribal Ordinance 74, the Integrated Resource Management Plan for the Warm Springs Reservation addresses the protection of Locally Rare and Culturally significant species and all requirements of this plan must be followed.

ix. Integrated Pest Management (IPM) Practices

All applicants must follow Section 2.2 of the PGP and any additional requirements for spraying pesticides on the Warm Springs Reservation in accordance with Warm Springs Tribal ordinances 45, 74, 80 & 81 and the specific Project Assessment on Pesticide and herbicide use.

x. Water Quality-Based Effluent Limitations

Discharges must be controlled as necessary to meet applicable numeric and narrative tribal water quality standards.

If at any time applicant become aware, or Tribe or EPA determines, that the discharge causes or contributes to an excursion of applicable water quality standards, corrective action must be taken immediately and as required in PGP Part 6.

xi. Pesticide Discharge Management Plan (PDMP)

Applicants must prepare a PDMP for pest management area which must be kept up-to-date thereafter for the duration of coverage under this general permit, even if your discharges subsequently fall below the applicable NOI threshold. The PDMP consistent with the deadline outlined in Table 9-6 below must be developed and submitted to EPA and the Warm Springs Tribes.

The PDMP does not contain effluent limitations; the limitations are contained in PGP Parts 2 and 3 of the permit. The PDMP documents how applicant will implement the effluent limitations in PGP Parts 2 and 3 of the permit, including your evaluation and selection of control measures to meet those effluent limitations and minimize discharges. Contents of the PDMP are described fully in the PGP Section 5 and must be followed. Applicant wishing to spray on the Warm Springs Reservation will retain a copy of the final PDMP and immediately make copy available to the Warm Springs Tribes.

**Table 9-6. Pesticide Discharge Management Plan Deadline**

<b>Operators not required to submit an NOI.</b>	<b>Submit plan to Warm Springs Tribes.</b>
<b>CATEGORY</b>	<b>PDMP DEADLINE</b>
Operators who know or should have reasonably known, prior to commencement of discharge, that they will exceed an annual treatment area threshold identified in PGP Part 1.2.2 for that year. Operators who do not know or would reasonably not know until after commencement of discharge, that they will exceed an annual treatment area threshold identified in PGP Part 1.2.2 for that year.	Prior to first pesticide application covered under this permit. Prior to exceeding an annual treatment area threshold.
Operators commencing discharge in response to a declared pest emergency situation as defined in PGP Appendix A that will cause the operator to exceed an annual treatment area threshold.	No later than 90 days after responding to declared pest emergency situation.

xii. Effect of Corrective Action

The occurrence of a situation identified in PGP Part 6.1 may constitute a violation of the permit. All corrective measures described in PGP part 6 must be followed. The Warm Springs Tribes must be informed immediately of any corrective actions taken or required.

xiii. Recordkeeping and Annual Reporting

Applicant must keep written records as required in the PGP part 7. These records must be accurate and complete and sufficient to demonstrate compliance with the conditions of the permit. Applicant will also send copies of all EPA required reports to the Warm Springs Tribes at the same time required by the PGP.

xiv. Contact Information and Mailing Addresses

Mr. Stanley Smith, Tribal Council Chairman  
Confederated Tribes of Warm Springs  
PO Box C, Warm Springs, OR. 97761

Mr. Roy Spino, Chairman, Water Control Board  
Confederated Tribes of Warm Springs  
PO Box C, Warm Springs, OR. 97761

Mr. Charles Calica, Secretary Treasurer  
Confederated Tribes of Warm Springs  
PO Box C, Warm Springs, OR. 97761.

Mr. Robert Brunoe, General Manager Branch of Natural Resources  
Confederated Tribes of Warm Springs  
PO Box C, Warm Springs, OR. 97761

Mr. D. R. Sehgal, Manager, Tribal Environmental Office Manager  
Confederated Tribes of Warm Springs  
PO Box C, Warm Springs, OR. 97761

b. Confederated Tribes of the Umatilla Indian Reservation

- i. The Operator shall be responsible for achieving compliance with the Confederated Tribes of the Umatilla Indian Reservation's (CTUIR) Water Quality Standards
- ii. The Operator shall submit a copy of the Notice of Intent (NOI) to be covered by the general permit to the CTUIR Water Resources Program at the address below, at the same time it is submitted to EPA.

Confederated Tribes of the Umatilla Indian  
Reservation Water Resources Program  
46411 Timine Way  
Pendleton, OR 97801  
(541) 429-7200 Tel

- iii. The Operator shall be responsible for submitting all Pesticide Discharge Management Plans (PDMP) required under this general permit to the CTUIR Water Resources Program for review and determination that the PDMP is sufficient to meet Tribal Water Quality Standards, prior to the beginning of any discharge activities taking place.
- iv. The Operator shall be responsible for reporting an exceedance to Tribal Water Quality Standards to the CTUIR Water Resources Program at the same time it is reported to EPA.
- v. Tribal Cultural Resources:

The EPA is the lead federal agency for the issuance of NPDES Pesticide General Permits for Point Source Discharges from the Application of Pesticides (PGP) and must ensure that the operators comply with section 106 of the National Historic Preservation Act (NHPA). The CTUIR Tribal Historic Preservation Office (THPO) requests copies of each NOI which will define whether or not the undertaking has the potential to affect historic properties (including traditional gathering areas) and if so, define the undertaking's area of potential effect (APE). To be in compliance with the NHPA and be eligible for coverage under this permit, the EPA shall ensure the operator must meet the following criteria:

- I. The THPO will be provided 30 days to comment on the APE as defined in the permit application.
- II. If the project is an undertaking, a cultural resource assessment must occur. All fieldwork must be conducted by qualified personnel (as outlined by the Secretary of Interior's Standards and Guidelines; [http://nps.gov/history/local-law/arch\\_stnds\\_0.htm](http://nps.gov/history/local-law/arch_stnds_0.htm)) and documented using Oregon Reporting Standards <http://www.oregon.gov/OPRD/HCD/ARCH/docs/StateofOregonArchaeologicalSurveyandReportingStandards.pdf>



- III. The resulting report must be submitted to the THPO and the THPO must concur with the findings and recommendations before any ground disturbing work can occur. The THPO requires 30 days to review all reports.
- IV. The operator must obtain THPO concurrence in writing. If historic properties are present, this written concurrence will outline measures to be taken to prevent or mitigate effects to historic properties.

For more information regarding the specifics of the cultural resource process, see 36 CFR Part 800.

9.10.6. Federal Facilities in the State of Washington, except those located on Indian Country lands

a. Additional conditions:

i. **Requirements for Pesticide Applicators**

Permittees must be licensed in the State of Washington to apply pesticides and must comply with chapters 16-228 Washington Administrative Code (WAC), 15.58 Revised Code Washington (RCW), and 17.21 RCW.

ii. **Requirements for Pesticide Application**

- A. Permittees may only use pesticide products that are FIFRA labeled and must comply with the products' FIFRA label. Permit requirements do not reduce the requirements on the FIFRA label. The pesticide product must be labeled for the Permittee's intended use
- B. The application of pesticide products must not cause or contribute to violations of the Water Quality Standards for Surface Water of the State of Washington (chapter 173-201A WAC), Ground Water Quality Standards (chapter 173- 200 WAC), Sediment Management Standards (chapter 173-204 WAC), and human health-based criteria in the National Toxics Rule (40 CFR 131.36). Discharges that do not comply with these standards are prohibited.

Citations:

- Chapter 90.48 RCW
- RCW 90.48.010
- Chapter 173-201A WAC
- Chapter 173-226 WAC
- 173-226-070 WAC

iii. **Allowed Active Ingredients and Conditions For Use**

Restrictions on the active ingredients allowed, when, and how pesticide products may be applied (Conditions i – xii) are technology-based requirements Ecology has determined to meet AKART for the control of pollution. AKART requirements protect the existing beneficial uses of waters of the state provided for in Chapter 173-201A WAC.

The Permittee must avoid treatments that restrict public water use during the opening week of fishing season, Memorial Day weekend, Independence Day weekend, and Labor Day weekend and must minimize treatments that restrict public water use during weekends.

Citations:

- Chapter 90.48 RCW
- RCW 90.48.010
- Chapter 173-201A WAC
- WAC 173-201A-020
- WAC 173-201A-300
- WAC 173-201A-410(4)(c)(i and ii)
- Chapter 173-226 WAC
- WAC 173-226-070
- WAC 173-226-090

**iv. Aquatic Mosquito Control**

**A. Allowed Active Ingredients**

1. Bacillus sphaericus (strain H-5a5b)
2. Bacillus thuringiensis israelensis (Bti)
3. Malathion
4. Methoprene
5. Monomolecular surface films
6. Paraffinic white mineral oil
7. Spinosad
8. Temephos
9. Etofenprox
10. Malathion
11. Naled
12. Natural Pyrethrins
13. Permethrin
14. Piperonyl Butoxide (PBO)
15. Prallethrin
16. Resmethrin
17. Sumithrin (d-phenothrin)

**B. Additional Restrictions**

1. The Permittee may apply larvicides provided one or more of the following conditions are met.
  - a. Pretreatment surveillance of a potential larvicide application site indicates that at least one larvae/pupae is present in at least one of three dips. In the event that the Permittee finds larvae/pupae, and the area is treated, the Permittee may continue pre-emptive

- larvicide treatments without dipping for the remainder of the treatment season.
- b. Methoprene may be used as a pre-emergent dry-land treatment on intermittently flooded areas that have a historical record of mosquito hatches following flooding.
  - c. The application site is in, or adjacent to a county in which mosquito, bird, animal, or human mosquito-borne disease cases are confirmed during the current treatment season.
  - d. The treatment site is a catch basin, storm drain, and utility or transportation vault.
- 2. Permittees may only use paraffinic white mineral oil or malathion as larvicides if other pesticides are ineffective at a specific treatment site and the water body is non-fish bearing. To determine if the water body is fish bearing, consult with Washington Department of Fish and Wildlife (WDFW). Contact information for WDFW Regional Wildlife Biologists may be accessed at <http://wdfw.wa.gov/about/contact/>.
  - 3. The Permittee may not apply temephos in lakes, streams, in the littoral zone of water bodies, or on sites listed in Condition iv.B4 of Section 9.10.6 of this permit. The permit allows the use of temephos is allowed only in response to the development of pesticide resistance within a specific larval mosquito population.
  - 4. Due to the present of sensitive, threatened, candidate, or endangered only *Bacillus thuringiensis israelensis* (Bti) and *Bacillus sphaericus* (H-5a5b) may be used in the following areas:
    - a. Grant County, north of Moses Lake, within the Crab Creek watershed: T21N R27E Sections 1, and 12; T21N R28E Sections 7, 17, 18, 19, 28, 29, 30, 31, 32, and 33.
    - b. Grant County, south and west of Moses Lake and south of Interstate-90, the northern portion of the Potholes: T19N R27E Sections 33, 34, 35, and 36; T19N R28E Sections 29 and 30, 31, 32; T18N R27E Sections 1, 2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16 and 17; T18N R28E Sections 5, 6, 7, 8, 17, and 18.
    - c. Grant County, area within and near the Sun Lakes – Dry Falls State Park wetlands: T24NR27E and 28E.
    - d. Kitsap County: lakes, ponds, and wetlands located in T22N R1W Sections 1, 2, 10, 11, and 12.
    - e. Skamania County, east of Carson, all waters in T3N R8E Sections 23, 24, 25, 26, and 36; T3NR9E Sections 30 and 31.
    - f. Thurston County, west of Yelm: lakes, ponds, and wetlands located in T17N R1E Sections 8, 9, 16, and 21.

- g. Thurston County, T16N R4W Sections 31, 32, and 33.

v. **Aquatic Plant and Algae Management**

- A. This section applies to products applied to the eradication of noxious and WSDA quarantine list weeds and the control nuisance and noxious weeds in lakes, rivers, streams, other standing and flowing waterbodies (not including irrigation canals), emergent vegetation around waterbodies, and roadside and ditch banks. This does not cover activities in saltwater areas.

B. Weed Eradication

Eradication projects target only state-listed noxious weeds or plants listed on the WSDA quarantine-list. The goal is the complete and permanent removal of these species from the entire water body. As such, littoral zone limitations do not apply to eradication of noxious weeds or weeds on the quarantine list. Impacts to non-target plants are acceptable to the extent needed to eradicate the target plants. Eradication is allowed only for:

1. All noxious weeds as identified in chapter 16-750 WAC.
2. Plants listed on the quarantine list as identified in chapter 16-752 WAC.
3. Non-native and potentially invasive plants not listed on the above lists, as determined by the WSNWCB, WSDA, or Ecology.

C. Nuisance and Noxious Weed Control

The goal is to maintain native aquatic vegetation for habitat while allowing partial plant removal for recreation and other beneficial uses. Permit requirements differ depending on plant growth forms and the legal status of the plant species in Washington. Minimal impact to non-target plants is acceptable to the extent needed to control the target plants.

Nuisance plants are native plants that grow in such quantity that they restrict the beneficial uses of a waterbody as defined in chapter 173-201A WAC.

1. Aquatic noxious weed control

The Permittee may apply herbicides to:

- a. 100 percent of noxious weeds if they are Class A weeds, Class B weeds in areas where they are designated for control, as identified in chapter 16-750 WAC, and Class C weeds where they are selected for control by a county Noxious Weed Control Board (RCW 17.10.080).
- b. 100 percent of any submersed noxious or quarantine-list weeds not covered under (a) if the Permittee conducts weed control using a selective herbicide.

- c. 100 percent of any emergent or floating-leaved noxious weeds and quarantine listed weeds.

## 2. Aquatic nuisance plant control

The Permittee may apply chemicals to:

- a. No more than 25 feet on either side of a dock or no more than an area 50 feet wide per lot for individual treatments targeting submersed and floating-leaved plants. Treatment of the vegetated area may extend up to 25 feet beyond the end of the dock. On individual lots with no docks, treatment of the vegetated area can extend up to 50 feet from the shore.
- b. No more than 40 percent of emergent shoreline plants such as cattails and bulrush on individual lots for individual treatments.
- c. A percentage of a water body's littoral zone based on the littoral acres of the water body and the size of the water body.
  - i. The geographic area where the Permittee applies chemicals must remain the same for the entire length of the permit coverage up to the maximum percentage of the littoral zone allowed for by water body size.
  - ii. All untreated littoral areas must include native vegetation from the shore to the edge of the littoral zone where the plants stop growing in deeper water.
  - iii. The cumulative percentage of the littoral zone where herbicides may be applied must not exceed the amount allowed below:
    - 1) In water bodies up to 15 acres in size, the Permittee may apply herbicides to no more than 75 percent of the littoral zone.
    - 2) In water bodies over 15 acres and up to 50 acres in size, the Permittee may apply herbicides to no more than 60 percent of the littoral zone.
    - 3) In water bodies over 50 acres and up to 500 acres in size, the Permittee may apply herbicides to no more than 50 percent of the littoral zone.
    - 4) In water bodies over 500 acres in size, the Permittee may apply herbicides to no more than 30 percent of the littoral zone.

## 3. Roadside and ditch bank plant control

- a. For activities conducted by state and local agencies, the Permittee may apply herbicides to 100 percent of the plants within the right of way.

- b. The Permittee may apply herbicides to no more than 40 percent of native vegetation of roadsides and ditches on privately owned individual lots, but may apply herbicide to 100 percent of any noxious or quarantine-listed weeds.

4. Algae control.

The Permittee may apply algaecides to the entire water body or sections of the water body, as needed, when cyanobacteria or other potentially toxic or environmentally harmful algae species are expected to form blooms in the water body.

The Permittee may apply algaecides to filamentous algae so long as the treated areas do not exceed the maximum amount of littoral zone allowed for treatment in Condition v.C.2.c.111 of Section 9.10.6 of this permit. Different littoral zone limitations apply to the herbicide fluridone. See Treatment Limitations in Table 9-7.

5. Nutrient Inactivation

The Permittee may apply approved buffering agents and alum and calcium hydroxide/oxide and calcium carbonate as phosphorus inactivation products to the entire water body or sections of the water body per permit sections Table 9-8.

D. Allowed Active Ingredients

1. 2,4-D, Amine Formulation
2. 2,4-D, Ester Formulation
3. Diquat: Dibromide
4. Endothall, Dipotassium salt (e.g. Aquathol)
5. Endothall, Monopotassium salt (e.g. Hydrothol)
6. Fluridone
7. Glyphosate
8. Imazamox
9. Imazapyr
10. Sodium carbonate peroxyhydrate
11. Triclopyr TEA
12. Adjuvants: Agri-Dex™, Bond™, Bronc Max™, Bronc Plus Dry-EDT™, Class Act NG™, Competitor™, Cut-Rate™, Cygnet Plus™, Dyne-Amic™, Exciter™, Fast Break™, Fraction™, Intensify™, Interlock™, Kinetic™, Level 7™, LI-700™, Liberate™, Magnify™, One-Ap XL™, Pro AMS Plus Activator Penetrant™, Sinker™, Spray-Rite™, Tactic™, Tronic™

13. Nutrient Inactivation Products: aluminum sulfate, sodium aluminate, calcium hydroxide/oxide, and calcium carbonate. See Table 9.8 for specific restrictions on nutrient inactivation products.
14. Marker dyes, shading and water clarification products. See Table 9.9 for specific restriction on these products.

E. Additional Restrictions

1. Identified Wetlands

The Permittee may only treat high use areas to provide for safe recreation and boating in identified and/or emergent wetlands. Treated area must be limited to protect native vegetation. For eradication projects, the Permittee must make every effort to protect native wetland vegetation while removing noxious species.

2. Permittee must use Washington Department of Natural Resources (WDNR) Natural Heritage Program database to determine if sensitive, threatened, or endangered (rare) plants are present in the proposed treatment area. If a rare plant does occur in or around the waterbody, the Permittee must survey for the rare plant and mitigate for impacts to it. The rare plant database is currently located at <http://www1.dnr.wa.gov/nhp/refdesk/plants.html>.

3. The Application of Products

- a. The Permittee must comply with the specific restrictions/limitations on the use of each chemical listed in Tables 9.7 – 9.9 below.
- b. When there are potable water restrictions on the product label, the Permittee must not apply any chemical until it has notified people who withdraw drinking water from the water body. If requested by the affected water user(s), the Permittee must provide an alternative drinking water supply until the intake water tests at or below the concentration specified for that chemical in Table 9.7, or until the period specified in Table 9.7 for that chemical has elapsed. If there is no drinking water restriction listed in Table 9.7, the Permittee must follow all label conditions for potable water supply. If requested by a water user, the Permittee must provide advance notice of pending treatments on a time schedule agreed to by all parties.
- c. If the treatment affects potable water use on water bodies with municipal or community drinking water intakes, the Permittee must obtain written consent to the treatment from the municipality or community. The Permittee must keep this consent letter for 5 years.

- d. People withdrawing water under a legal water right or claim for irrigation or livestock watering purposes may request an alternate water supply during the treatment if the label has restrictions for those uses. The Permittee must provide an alternative water supply until the intake water tests at or below the irrigation restriction concentration or livestock drinking water concentration on the product label or until the time interval specified on the label has elapsed. If requested by a water user, the Permittee must provide advance notice of pending treatments on a time schedule agreed to by all parties.
  - e. The Permittee must follow EDFW's Fish and Wildlife Treatment Windows for Ecology's Aquatic Plant and Algae Management Permit (Treatment Windows) to protect salmon, steelhead, and bull trout populations and other sensitive species and habitats. WDFW may periodically update the Treatment Windows as new information becomes available see: [http://www.ecy.wa.gov/programs/wq/pesticides/final\\_pesticide\\_permits/aquatic\\_plants/permitdocs/wdfwtiming.pdf](http://www.ecy.wa.gov/programs/wq/pesticides/final_pesticide_permits/aquatic_plants/permitdocs/wdfwtiming.pdf). If a waterbody is not listed in the Treatment Windows, the default window is July 15 – October 31, both dates inclusive. Contact the regional WDFW biologist to develop a new timing window if the default window will not provide for adequate treatment.
  - f. The Permittee must follow the specific restrictions and advisories identified in Tables 9.7-9.9 below. Recreational restrictions/advisories apply to swimming, boating, water skiing, etc. Swimming restrictions/advisories apply to primary contact activities such as swimming, wading, and water skiing. Drinking water restrictions apply to residents drinking lake water as their sole source of potable water or where they hold a water right for potable water.
- F. Monitoring Requirements
- 1. Application of Herbicides and Algaecides
    - a. The Permittee must monitor dissolved oxygen levels pre- and post-treatment when contact herbicides are used in water bodies on the 303(d)-list for dissolved oxygen. Immediately before treating, the Permittee must monitor surface and bottom dissolved oxygen concentrations at a sampling location in the center and at the edge of the proposed treatment area(s).
    - b. The Permittee must select at least one representative treatment area to monitor each time the water body is treated. The Permittee must monitor post-treatment surface and bottom dissolved oxygen concentrations no earlier than seven days and no later than 14 days after the treatment, at the same time of day that the pre-treatment



monitoring occurred and at the same sites and depths. The Permittee must keep the data for 5 years and make it available upon request.

## 2. Application of Phosphorus Inactivation Products

### a. Aluminum sulfate or sodium aluminate (alum)

For whole or partial lake treatments, the Permittee must measure, at a minimum, surface water pH once in the morning prior to any alum addition and once in the afternoon one hour after alum addition has stopped for that day. The Permittee must continue this monitoring regime for the duration of the treatment and for 24 hours following treatment completion. The monitoring location must be representative of water body-wide conditions. If the pH decreases to less than 6.2, the Permittee must stop treatment, analyze for alkalinity, and must take immediate steps to increase the pH.

### b. Calcium hydroxide/oxide or calcium carbonate treatment

The Permittee must measure pH once on the day before treatment, and once in the morning and once in the afternoon for the duration of the treatment and for 24 hours following treatment. If the pH is above 9.0 due to the effects of the treatment (rather than through photosynthesis), the Permittee must stop treatment.

### c. Continuous Injection Systems

The Permittee must measure pH at a minimum once every two weeks during the first month of continuous injection and thereafter once a month for the duration of the injection process. The Permittee must ensure that pH measurements represent water body-wide conditions, unless the injection system is in an isolated area in relation to the main water body (e.g., in a bay with a narrow channel to the main water body). For isolated areas of water bodies, the Permittee must measure pH at the end of the bay and in the main water body.

**Table 9-7. Specific Restrictions on the Application of Herbicides and Algaecides for Control and Eradication Projects**

Active Ingredient	Subject to Timing	Restrictions/ Advisories	Treatment Limitations	Other Specific Restrictions
<b>2, 4 – D (amine)</b>	Yes for salmon, steelhead, bull trout – check timing table for other priority species	Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area)	<b>Control projects only:</b> Do not apply within 400 feet of an outlet stream if there is an outflow.	Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the 2,4-D level in the intake water is determined to be 0.07 mg/L or less, or the applicator complied with label setback distances.
<b>2, 4 – D (ester)</b>	See other specific restrictions – Yes for salmon, steelhead, bull trout – check timing table for other priority species	Swimming restriction during treatment, and for 24-hours post-treatment (in the treated area)	None	Do not use in salmon-bearing waters.
<b>Diquat</b>	Yes for salmon, steelhead, bull trout – check timing table for other priority species	Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area)	<ul style="list-style-type: none"> <li>Do not spray on emergent shoreline vegetation (e.g. cattails, bulrush) or algae.</li> <li>Do not pour Diquat directly from container.</li> </ul>	Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 10 days following application. As an alternative to waiting, treated water may be used for drinking once the Diquat level in the intake water is determined to be 0.02 mg/L or less.
<b>Endothall Dipotassium salt (Aquathol™)</b>	Yes for salmon, steelhead, bull trout – check timing table for other priority species	Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area)	<b>Control projects only:</b> Do not apply within 400 ft of an outlet stream if there is an outflow.	Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the endothall level in the intake water is determined to be 0.10 mg/L or less.

**Table 9-7. Specific Restrictions on the Application of Herbicides and Algaecides for Control and Eradication Projects**

Active Ingredient	Subject to Timing	Restrictions/ Advisories	Treatment Limitations	Other Specific Restrictions
<b>Endothall Monopotassium salt (Hydrothol 191™)</b>	Yes for salmon, steelhead, bull trout – check timing table for other priority species	Swimming advisory during treatment, and for 24-hours post-treatment (in the treated area)	Use for control of filamentous algae, cyanobacteria, or harmful algae only. See Condition v.C.4 of Section 9.10.6 of this permit. Limit concentrations to 0.2-mg/L of active ingredient	<ul style="list-style-type: none"> <li>• Treatment must occur from the shoreline outward into the water body.</li> <li>• Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 14 days following application. As an alternative to waiting, treated water may be used for drinking once the endothall level in the intake water is determined to be 0.1 mg/L or less.</li> </ul>
<b>Fluridone</b>	No for fish, but check timing table for other sensitive species.	None	Unless operating under a plan to eradicate a noxious weed, fluridone application is further limited to no more than 50 percent of the littoral zone in lakes up to 50 acres and no more than 40 percent of the littoral zone in lakes from 50 - 500 acres.	None
<b>Glyphosate</b>	No for fish, but check timing table for other sensitive species.	None	None	None
<b>Sodium carbonate peroxyhydrate</b>	No for fish, but check timing table for other sensitive species.	Swimming advisory during treatment, and for 2-hours post-treatment (in the treated area)	Do not treat plants growing on the shore.	None
<b>Imazapyr</b>	No for fish, but check timing table for other sensitive species.	None	None	None
<b>Imazamox</b>	No for fish, but check timing table for other sensitive species.	None	None	None

**Table 9-7. Specific Restrictions on the Application of Herbicides and Algaecides for Control and Eradication Projects**

Active Ingredient	Subject to Timing	Restrictions/ Advisories	Treatment Limitations	Other Specific Restrictions
<b>Triclopyr TEA</b>	No for fish, but check timing table for other sensitive species.	Swimming advisory during treatment, and for 12-hours post-treatment (in the treated area)	Aerial applications are not allowed.	Ensure that residents drinking lake water turn off their intakes and do not resume drinking treated water for 28 days following application. As an alternative to waiting, treated water may be used for drinking once the triclopyr level in the intake water is determined to be 0.4 mg/L or less, or the applicator complied with label setback distances.

**Table 9-8. Nutrient Inactivation Products**

Product	Subject to Timing	Restrictions/ Advisories	Treatment Limitations	Other Specific Restrictions
<b>Alum</b>	<ul style="list-style-type: none"> <li>No for fish, but check timing table for sensitive species.</li> <li>Timing should address aquatic plant biomass that may interfere with inactivation of sediment phosphorus (requiring early spring or fall treatment).</li> </ul>	None	<ul style="list-style-type: none"> <li>Application must cease when wind speed is greater than 15 miles per hour</li> <li>Powdered alum must be mixed with water to form a slurry before applying to the water surface.</li> <li>The pH of lake water during treatment must remain between 6.0 and 8.5 based on lake average.</li> <li>Only aluminum compounds suitable for water treatment may be used.</li> <li>Buffering materials must be available for use.</li> </ul>	<ul style="list-style-type: none"> <li>A jar test must be completed prior to whole lake treatments only if a buffer other than sodium aluminate is used or a ratio of liquid alum to liquid sodium aluminate differs from 2:1 by volume.</li> <li>An on-site storage facility is required for any treatment requiring 9,000 gallons of alum or more, or the project proponent must have a plan to store any unused alum or buffering products.</li> <li>Follow the monitoring requirements in Condition v.F.2 under Section 9.10.6 of this permit</li> </ul>
<b>Calcium</b>	No for fish, but check timing table for sensitive species.	None	The pH must remain between 6.0 and 9.0.	<ul style="list-style-type: none"> <li>A jar test must be completed prior to treatment to identify proper dosing levels. This jar test needs to be conducted at least over a 24-hour period to ensure that the pH response is at equilibrium with water chemistry.</li> <li>Follow the monitoring requirements in Condition v.F.2 under Section 9.10.6 of this permit</li> </ul>

**Note:** The products Nutrient Inactivation products listed above are not registered as pesticides through FIFRA or regulated under any other federal laws or regulations. A licensed applicator is not needed for the application of any of these products to waters of the United States.

**Table 9-9. Biological Water Clarifiers, Shading Products**

Product	Restrictions
Shading products	Do not apply directly to rivers or streams or any lake that discharges to other surface waters of the state.
Biological Water Clarifiers	Use only in water bodies with no discharge to other surface waters of the state during and for two weeks after treatment.

**Note:** These restrictions are in addition to the federal FIFRA label requirements (when applicable).

#### vi. Aquatic Noxious Weed Control

- A. This section applies to products applied to control emergent Washington state noxious and quarantine list weeds in the riparian areas around waterbodies, including salt water. This section does not apply to the in-water application of products to control aquatic plants. For in-water use, refer to Condition v of Section 9.10.6 of this permit. Noxious weeds as identified in chapter 16-750 WAC.

Plants authorized for treatment include:

1. Noxious weeds as identified in chapter 16-750 WAC.
2. Plants listed on the WSDA quarantine list as identified in chapter 16-752 WAC.
3. Non-native and potentially invasive plants not listed on the above lists, as determined by the WSNWCB, WSDA, the Washington Invasive Species Council (WISC), or Ecology.

#### B. Allowed Active Ingredients

1. Bispyribac-sodium
2. Carfentrazone-ethyl
3. 2,4-D, Amine Formulation
4. Flumioxazin
5. Glyphosate
6. Imazamox
7. Imazapyr
8. Penoxsulam
9. Triclopyr TEA
10. Adjuvants: Agri-Dex™, Bond™, Bronc Max™, Bronc Plus Dry-EDT™, Class Act NG™, Competitor™, Cut-Rate™, Cygnet Plus™, Dyne-Amic™, Exciter™, Fast Break™, Fraction™, Intensify™, Interlock™, Kinetic™, Level 7™, LI-700™, Liberate™, Magnify™, One-Ap XL™, Pro AMS Plus Activator Penetrant™, Sinker™, Spray-Rite™, Tactic™, Tronic™
11. Marker Dyes

C. Additional Restrictions

Permittees shall make herbicide applications only for the control of state listed noxious weeds and weeds on the quarantine list that are found in aquatic environments. Noxious weed means those species of plants listed as Noxious class A, B, and C weeds by the Washington State Noxious Weed Control Board in accordance with 17.10 RCW. WSDA maintains the quarantine list in accordance with 17.24 RCW.

vii. **Irrigation System Aquatic Weed Control**

A. Allowed Active Ingredients

1. Copper (dissolved)
2. Acrolein
3. Endothall, Dipotassium salt (e.g. Aquathol)
4. Endothall, Monopotassium salt
5. Xylene
6. Sodium Carbonate Peroxyhydrate
7. Fluridone
8. Imazapyr

B. Additional Restrictions

1. Point of Compliance

- a. The point of compliance means the location where water treated with pesticides enters a surface water body.
- b. For Amon Wasteway, Snipes Creek Wasteway, Sulphur Creek Wasteway, and Crab Creek, the point of compliance shall be at or above the following locations:
  - i. Amon Wasteway where it exits the golf course at Gage Road (approximately latitude 46.22715, longitude -119.26024).
  - ii. Snipes Creek Wasteway at the Benton 29.32 Lateral (near McCreadie Road) (approximately at latitude 46.25630, longitude -119.67406).
  - iii. Sulphur Creek Wasteway at Sheller Road (approximately at latitude 46.33167, longitude -119.98021).
  - iv. Crab Creek at Red Rock Coulee / DCC1 wasteway (approximately at latitude 46.84693, longitude -119.58673).

## 2. Discharge Limitations

- a. The discharge of any allowed active ingredient (Condition vii.A.1-8 of Section 9.10.6 of this permit) must not exceed values identified in Table 9-10.

**Table 9-10. Point of Compliance Discharge Limitations**

Parameter	Maximum Instantaneous Concentration
Copper (dissolved)	25 ug/l
Acrolein	21 ug/l
Dipotassium Salt of Endothall	<ul style="list-style-type: none"> <li>• mg/l (acid equivalent) from March 1 to July 15</li> <li>• 2.5 mg/l (acid equivalent) from July 16 to February 29</li> <li>• See Condition vii.B.6 under Section 9.10.6 of this permit</li> </ul>
Mono Salt of Endothall	<ul style="list-style-type: none"> <li>• 50 ug/l (acid equivalent)</li> <li>• See Condition vii.B.6 under Section 9.10.6 of this permit</li> </ul>
Xylene	5.1 mg/l
Sodium Carbonate Peroxyhydrate	See Condition vii.B.3 under Section 9.10.6 of this permit
Fluridone	See Condition vii.B.4 under Section 9.10.6 of this permit
Imazapyr	See Condition vii.B.5 under Section 9.10.6 of this permit

The maximum instantaneous concentration means the highest allowable discharge at any time.

3. For sodium carbonate peroxyhydrate applications, the permittee need not conduct monitoring under Condition vii.C under Section 9.10.6 of this permit
4. For fluridone applications:
  - a. The permittee shall only apply fluridone between October 1 and March 31.
  - b. The permittee shall only apply in-water fluridone to slow-moving or quiescent waters.
  - c. The permittee shall conduct fluridone treatments in a manner that will prevent treated water from reaching a point of compliance for at least eight weeks after application.
  - d. The permittee need not conduct monitoring under Condition vii.C under Section 9.10.6 of this permit.
5. For imazapyr applications:
  - a. The permittee shall only apply imazapyr between October 1 and March 31.
  - b. The permittee shall only apply imazapyr to slow-moving or quiescent waters.
  - c. The permittee shall conduct imazapyr treatments in a manner that will prevent treated water from reaching a point of compliance for at least two weeks after application.

- d. The permittee need not conduct monitoring under Condition vii.C under Section 9.10.6 of this permit
6. For endothall applications, the permittee must not release endothall from irrigation canals at times that smolting salmonids are present.

C. Monitoring Requirements

The permittee shall monitor all pesticide applications where the treated water eventually flows to a point of compliance according to Table 9-11.

**Table 9-11: Sampling Schedule**

Monitoring Site	Parameter	Method Detection Limit	Minimum Sampling Frequency	Sample Type
Point(s) of Compliance	Flow	N/A	Concurrent with all other samples	Measurement
Point(s) of Compliance	Copper, dissolved	5 ug/L	2 times per treatment See Condition vii.C.1 under Section 9.10.6 of this permit.	Grab
Point(s) of Compliance	Hardness (only when monitoring copper)	1 mg/l	Concurrently with copper sampling	Grab
Point(s) of Compliance	Acrolein	2 ug/l	2 times per treatment (Condition vii.C.1 under Section 9.10.6 of this permit)	Grab
Point(s) of Compliance	Endothall	12 ug/l	2 times per treatment (Condition vii.C.1 under Section 9.10.6 of this permit)	Grab
Point(s) of Compliance	Xylene	1 mg/l	2 times per treatment (Condition vii.C.1 under Section 9.10.6 of this permit)	Grab
None	Sodium Carbonate	N/A	None	None
None	Fluridone	N/A	None	None
None	Imazapyr	N/A	None	None

1. The permittee shall take the two samples to identify the highest concentration of the pesticide. The permittee shall take both samples during the peak pesticide concentration at the compliance point.
  - a. If the travel time is 20 hours or more, the permittee shall space their sampling at least two hours apart.
  - b. If the travel time is less than 20 hours, the permittee shall space their samples at 10% of the travel time of the pesticide.
  - c. If the permittee is tracking multiple treatments simultaneously, the permittee shall use the shortest travel time to determine if the permittee follows Condition vii.C.1.a or Condition vii.C.1.b under Section 9.10.6 of this permit.
2. If all treated water is consumed (i.e. used on-farm) and the end of the canal/spillway is dry, the permittee need not conduct monitoring.



3. The permittee must keep all monitoring records for a period of 5 years and make them available upon request.
4. In some situations, the permittee prevents treated water from reaching some points of compliance by closing side canals/spillways. (For example, a permittee closes a gate to a spillway while treating the primary canal and all the treated water passes the closed gate.) The permittee shall conduct full monitoring (Condition vii.C under Section 9.10.6 of this permit) at the points of compliance corresponding to the closed canals/spillways when the canals/spillways are reopened unless the closed canal/spillway is kept closed for double the travel time it takes the treated water to reach the point of closure. In this situation, no monitoring is required. For this special situation only, the travel time is counted from when the pesticide application ends. (For example, if a treatment ends at 1:00 and it takes four hours to pass the closed gate at 5:00, the permittee shall keep the gate closed for another four hours until 9:00 for this special situation to apply).
5. Time Travel Study
  - a. The permittee shall support all monitoring by completing a time travel study at each application site.
  - b. Time travel studies shall determine the amount of time it takes the pesticide to travel from the application site to the point of compliance.
  - c. The flow conditions during the time travel study shall mimic the conditions during pesticide application.
  - d. The permittee shall use time travel studies that are less than five years old.
  - e. Time travel studies are only required for pesticide applications that flow to a point of compliance.
6. Sampling and Analytical Procedures
  - a. The permittee shall ensure that all samples and measurements taken to meet the requirements of this permit are representative of the volume, concentration, and nature of the monitored parameters.
  - b. The permittee shall ensure that sampling and analytical methods used to meet the monitoring requirements specified in this permit conform to the latest revision of the Guidelines Establishing Test Procedures for the Analysis of Pollutants contained in 40 CFR 136 or to the latest revision of Standard Methods for the Examination of Water and Wastewater (APHA).
  - c. Acrolein testing may follow the procedures of Solid Waste Method 8260.

### viii. Fish Management

#### A. Allowed Active Ingredients

1. Rotenone
2. Antimycin-A
3. (Potassium Permanganate ( $\text{KMnO}_4$ ) is the only chemical permitted to neutralize rotenone treated waters when necessary to prevent damage to non-targeted organisms and maintain water quality outside of the area intended for rotenone treatment.

#### B. Additional Restrictions

1. In order to prevent unnecessary damage to the environment, the permittee shall follow the best management practices defined below on the day of application.

Powdered rotenone formulations shall be applied in such a way that minimizes airborne dust, using the best available technology such as the method outlined in “Utah’s Procedure for Mixing Powdered Rotenone into a Slurry” (Thompson et al. 2001).

In order to prevent an exceedance of water quality standards outside the area intended for rehabilitation, rotenone treatment should only take place in lakes that are not discharging to downstream waters. This is accomplished by limiting treatments to lakes with closed basins or conducting treatments only during periods of low water, usually September or October.

In instances where treated waters may potentially discharge to downstream waters resulting in an exceedance of water quality standards outside the treatment area, such discharge shall be prevented by installing adequate temporary water control measures.

When it is necessary and unavoidable to discharge rotenone treated waters to downstream waters, the permittee shall conduct pretreatment water quality and biological monitoring.

Treated waters shall be effectively neutralized and detoxified using potassium permanganate so that water quality standards are not exceeded below the neutralization zone. For purposes of this section, neutralization zone is defined as the downstream waters where potassium permanganate has been applied but has not yet fully neutralized the rotenone, due to the lag time normally associated with detoxification. The neutralization zone is typically considered the distance that water can be expected to travel in 20 minutes. Since the neutralization zone may contain toxic levels of rotenone and potassium permanganate, some fish mortalities may occur in this zone.

Below the neutralization zone, rotenone must be totally neutralized and residual potassium permanganate levels maintained at a non-toxic level of 1 mg/L, not to exceed 2 mg/L. Live trout cars will be set up

below the neutralization zone to monitor the effectiveness of detoxification measures.

Detoxification procedures must utilize calibrated equipment to achieve the minimum effective concentration of potassium permanganate to oxidize the rotenone within the neutralization zone. Potassium permanganate concentrations must be closely monitored using a field calibrated spectrophotometer to keep residual permanganate levels at a level that effectively neutralizes rotenone while preventing damage to aquatic life downstream of the treatment area and neutralization zone.

2. In order to minimize the discharge of inert ingredients contained in liquid rotenone formulations, only powdered rotenone formulations shall be utilized, except in very limited cases when the Permittee finds it necessary to treat waters that are inaccessible by boat, such as weedy shorelines or marshy areas.
3. Monitoring

The Permittee must conduct monitoring on each water body treated with aquatic pesticides to determine the extent and duration of the short-term water quality reduction resulting from rotenone applications. The Permittee must monitor according to Tables 9-12 and 9-13.

**Table 9-12. Rotenone Monitoring Schedule**

Parameters	Units	Minimum Sampling Frequency	Sample Type
Rotenone Toxicity - Trout Bioassay: 48-hr live box test (5 trout); 100% survival of rainbow trout	Number of days until 100% survival	Once post-treatment, approximately 3-8 weeks after treatment	Observation (no lab accreditation required)
If rotenone formulations containing Benzene are used: VOC, semi-VOC, plus any other inert ingredients listed on MSDS <sup>1</sup>	µg/L	1. 24 hours after treatment; 2. four weeks after treatment	Grab
pH	Standard	Once pretreatment	Grab
Temperature	°F	Once pretreatment	Grab
Alkalinity <sup>2</sup>	mg/L CaCO <sub>3</sub>	Once pretreatment <sup>2</sup>	Grab
Organic demand <sup>2,3</sup>	Standard <sup>3</sup>	Once pretreatment <sup>2</sup>	Grab
Zooplankton sampling	See below <sup>4</sup>	1. Pre-treatment; 2. Six months after treatment; 3. One year after treatment	Composite <sup>4</sup>

<sup>1</sup> If rotenone formulations containing Benzene are used, test for the following parameters: VOC (EPA method 8310) and semi-VOC (EPA method 502.2). Also test for any other inert ingredients listed on MSDS (i.e. the MSDS for Prentox ® Prenfish™ Toxicant lists naphthalene; 1,2,4-trimethylbenzene; and acetone).

<sup>2</sup> Only if neutralization of rotenone with potassium permanganate is required.

<sup>3</sup> Use the guidelines provided in Engstrom-Heg (1971) to determine organic demand for KMnO<sub>4</sub>.

<sup>4</sup> Lakes only. Zooplankton sampling protocols set forth on Page 4-5 of "Water Quality Assessments of Selected Lakes within Washington State - 1998" Department of Ecology, December 2000, Publication No. 00-03-039

**Table 9-13. Downstream Monitoring Schedule Table**

Parameters	Units	Minimum Sampling Frequency	Sample Type
Rotenone Toxicity - Trout Bioassay: 48-hour live box test (5 trout)	% Survival	1. Begin test at time of treatment and 2. Repeat at one week intervals until upstream treated water is detoxified per upstream bioassay.	Observation (no lab accreditation required)
Rotenone <sup>1</sup>	mg/L	Once 24 hours following treatment	Grab
*If liquid rotenone is used: VOC, semi-VOC, plus any other inerts <sup>2</sup>	ug/L	1. 24 hours after treatment, and 2. four weeks after treatment	Grab
pH	Standard	Once pretreatment	Grab
Temperature	°F	Once pretreatment	Grab
Alkalinity <sup>3</sup>	mg/L CaCO <sub>3</sub>	Once pretreatment <sup>3</sup>	Grab
Organic Demand <sup>3,4</sup>	Standard <sup>4</sup>	Once pretreatment <sup>3,4</sup>	Grab
Zooplankton Sampling	See Below <sup>5</sup>	1. Pre-treatment, 2. Six months after treatment, and 3. One year after treatment	Composite <sup>5</sup>

<sup>1</sup> Analyze using methods set forth in Dawson et al. (1983);

<sup>2</sup> If rotenone formulations containing Benzene are used, test for the following parameters: VOC (EPA method 8310) and semi-VOC (EPA method 502.2). Also test for any other inert ingredients listed on MSDS (i.e. the MSDS for Prentox® Prenfish™ Toxicant lists naphthalene; 1,2,4-trimethylbenzene; and acetone).

<sup>3</sup> Only if neutralization of rotenone with potassium permanganate is required.

<sup>4</sup> Use the guidelines in Engstrom-Heg (1971) for measuring organic demand for KMnO<sub>4</sub>.

<sup>5</sup> Lakes only. Zooplankton sampling protocols set forth on Page 4-5 of "Water Quality Assessments of Selected Lakes within Washington State - 1998" Department of Ecology, December 2000, Publication No. 00-03-039;

<sup>6</sup> "Macroinvertebrate monitoring" includes gathering benthic invertebrate samples and summarizing the data using the benthic index of biotic integrity (B-IBI) and a ratio measure of the number of observed taxa divided by the number of expected taxa, the River Invertebrate Prediction and Classification System (RIVPACS). All bioassessment sampling and related habitat survey data, laboratory analysis, quality assurance, and data analysis shall follow the protocols in *Benthic Macroinvertebrate Biological Monitoring Protocols for Rivers and Streams: 2001 Revision*, Plotnikoff and Wiseman, August 2001 (<http://www.ecy.wa.gov/biblio/0103028.html>).

## ix. Invasive Moth Control

### A. Allowed Active Ingredients

1. *Bacillus thuringiensis* var. *kurstaki* based pesticides
2. Adjuvants that may be used for invasive moth control include latex-based adjuvants.

### B. Additional Restrictions

#### 1. Monitoring Requirements

The permittee must monitor all pesticide application activities. Minimum Monitoring must include the parameters listed in Table 9-14. The permittee must keep their records of their monitoring and make it available upon request.

One sampling event must be conducted per treatment season. When treatments are not conducted, no sampling is required. One grab

sample of water must be tested for concentrations pesticide active ingredient before and immediately after the application (including indirect applications) to waters. This monitoring is required to determine impacts on the receiving environment.

**Table 9-14. Invasive Moth Monitoring Table**

Item or Parameter	Minimum Frequency	Type of Sample
Date, start/stop times for application	Each day when spraying occurs	Record
Total acres sprayed	Each day when spraying occurs	Record
Wind speed	Each day when spraying occurs	Record
Location of application	Each day when spraying occurs	Record
Name of applicator	Each day when spraying occurs	Record

**x. Aquatic Invasive Species**

**A. Allowed Active Ingredients**

1. Chloride for marine and freshwater application.
2. Potassium chloride for marine and freshwater application.
3. Chlorine compounds including chlorine dioxide, sodium chlorite, sodium hypochlorite, and calcium hypochlorite for marine and freshwater application.
4. Acetic acid for marine and freshwater application
5. Calcium hydroxide/oxide (lime) and carbon dioxide for marine and freshwater application.
6. Rotenone for freshwater application.
7. Antimycin-A for freshwater application.
8. Potassium permanganate (KMnO<sub>4</sub>) for freshwater application.
9. Endothall, Monopotassium salt (e.g., Hydrothol)
10. Sodium carbonate peroxyhydrate for freshwater application.
11. Methoprene for freshwater application.
12. Chelated copper compounds for freshwater application.
13. Pseudomonas fluorescens strain CLO145 for freshwater application.
14. Heating/cooling (temperature alteration) for marine and freshwater application.

**B. Additional Restrictions**

**1. Activities Covered**

Activities covered include management activities for nonnative invasive aquatic animals and nonnative invasive marine algae that result in the discharge of chemicals or control products into surface waters of the state of Washington. Surface waters include fresh, brackish, marine, and estuarine waters. Products subject to this

condition include algacides, herbicides, insecticides, molluscicides, piscicides and any other chemical or product appropriate for use in managing these organisms.

Management activities are organized into two categories: Marine Projects and Freshwater Projects.

## 2. Marine Projects

Marine projects occur in marine or estuarine waters and target nonnative invasive animals and nonnative invasive algal species.

Marine projects are allowed for:

- a. Animal species as identified in WAC 220-12-090.
- b. Animals or marine algae listed on the Washington Aquatic Nuisance Species Committee “watch list” of invasive species or on the Washington Invasive Species Council (WISC) management priority list (<http://www.invasivespecies.wa.gov/priorities.shtml>).
- c. Animals listed by the United States Fish and Wildlife Service (USFWS) as injurious wildlife under the Lacey Act (18 U.S.C. 42; 50 CFR 16).
- d. Nonnative *potentially invasive* marine animals and algae not listed on the above lists, as determined by Ecology in consultation with the Washington Department of Fish and Wildlife (WDFW), or the Washington Department of Natural Resources (WDNR), or the Washington Department of Agriculture (WSDA), or the WISC, or the Washington Aquatic Nuisance Species (ANS) Committee, or applicable federal agencies such as the USFWS.

## 3. Freshwater Projects

Freshwater projects occur in rivers, streams, lakes, ponds, brackish inland water bodies, *wetlands*, or wet areas and target nonnative invasive freshwater animals are allowed for:

- a. Prohibited or unlisted freshwater animals as identified in WAC 220-12-090.
- b. Freshwater animals listed on the Washington Aquatic Nuisance Species Committee “watch list” of invasive species or on the Washington Invasive Species Council (WISC) management priority list (<http://www.invasivespecies.wa.gov/priorities.shtml>).
- c. Freshwater animals listed by the USFWS as injurious wildlife under the Lacey Act (18 U.S.C. 42; 50 CFR 16).
- d. Nonnative potentially invasive freshwater animals not listed on the above lists, as determined by Ecology in consultation with WDFW, or WDNR, or WSDA, or WISC, or the ANS Committee, or applicable federal agencies such as the USFWS.

4. Specific Restrictions on the Application of Products
  - a. Except for *emergencies*, the Permittee must limit treatments that restrict public water use during weekends in *high use areas* or *highly populated areas*.
  - b. Permittees must comply with the specific application restrictions for each product as identified in Tables 9-15 and 9-16. WDFW developed the timing windows identified in Tables 9-15 and 9-16 to avoid adverse impacts to priority species (federal-and-state-listed and other sensitive and vulnerable species). WDFW may periodically update the Treatment Windows when new information becomes available. Restrictions/Advisories identified in Tables 9-15 and 9-16: Recreational restrictions apply to swimming, boating, water skiing, etc. Swimming restrictions apply to primary contact activities such as swimming, wading, and water skiing.
  - c. The Permittee must use Washington Department of Natural Resources Natural Heritage Program database to determine if sensitive, threatened, or endangered (rare) plants are present in the proposed treatment area. If a rare plant does occur in or around the waterbody, the Permittee survey for the rare plant and mitigate for impacts if necessary. The rare plant database is located at <http://www1.dnr.wa.gov/nhp/refdesk/platns.html>.

**Table 9-15. Marine Application Restrictions**

<b>Chemical or Control Measure</b>	<b>Subject to Timing Windows</b>	<b>Restrictions/ Advisories</b>	<b>Treatment Limitations</b>
<b>Sodium chloride &amp; Potassium chloride</b>	No, but check with WDFW before treatment to determine critical habitat areas.	None	<ul style="list-style-type: none"> <li>• Limit treatments to the lowest effective concentration or amount of these salts necessary to kill the targeted organism.</li> <li>• Limit treatment to docks, boat hulls, and fixed objects or defined areas.</li> <li>• Spray or apply directly on target organisms when if they are out of water (apply at low tide).</li> <li>• The Permittee may treat defined areas, such as marinas or coves, if the Permittee can limit water exchange behind impermeable barriers.</li> </ul>
<b>Chlorine</b>	No, but check with WDFW before treatment to determine critical habitat areas.	If treating in an area accessible by the public, post buoys around the treatment <b>area</b> .	<ul style="list-style-type: none"> <li>• Limit treatments to the lowest effective concentration or amount (e.g., if using swimming pool pellets) to kill the targeted organism.</li> <li>• Where practicable, use chlorine dioxide/sodium chlorite instead of sodium hypochlorite or calcium hypochlorite.</li> <li>• Use under tarpaulins or impermeable covers secured over the invasive organisms. Seal edges to the substrate as thoroughly as possible.</li> <li>• Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>• Leave tarpaulins on for at least one day before removing. If this is not possible, test for chlorine using a swimming pool test kit and neutralize any residual chlorine using ascorbic acid (vitamin C) before removing the cover.</li> </ul>
<b>Acetic Acid</b>	No, but check with WDFW before treatment to determine critical habitat areas.	<p>If treating in an area accessible by the public, post buoys around the treatment area.</p> <p>Restrict swimming for 12 hours in the treatment area if spraying directly on organisms.</p> <p>Restrict public access to area when diluting concentrated acid.</p>	<ul style="list-style-type: none"> <li>• Limit treatments to the lowest effective concentration to kill the targeted organism (vinegar concentrations – 5-10% are reported to be effective for soft-bodied marine organisms).</li> <li>• Use under tarpaulins or impermeable covers secured over the invasive organisms. Seal the edges to the substrate as thoroughly as possible.</li> <li>• Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>• Remove covers as soon as the target organisms are dead.</li> <li>• Spray directly on target organisms if they are out of water (tidal).</li> <li>• The Permittee may treat defined areas, such as marinas, if the Permittee can limit water exchange behind impermeable barriers.</li> </ul>



**Table 9-15. Marine Application Restrictions**

Chemical or Control Measure	Subject to Timing Windows	Restrictions/ Advisories	Treatment Limitations
<b>Calcium hydroxide/oxide (lime)</b>	No, but check with WDFW before treatment to determine critical habitat areas.	If in an area accessible by the public, post buoys around the treatment area.	<ul style="list-style-type: none"> <li>Limit treatments to the lowest effective concentration or amount necessary to kill the targeted organism.</li> <li>Use under tarpaulins or impermeable covers secured over the invasive organisms and limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>Remove covers as soon as the target organism is dead.</li> <li>For direct applications, apply only to target organisms (e.g. invasive echinoderms). Do not treat un-infested areas.</li> </ul>
<b>Heat/Freezing</b>	No, but check with WDFW before treatment to determine critical habitat areas.	None	<ul style="list-style-type: none"> <li>Limit treatment to docks, boat hulls, and fixed objects or defined areas</li> <li>May use in conjunction with pressure washing to remove invasive organisms from docks and infrastructure.</li> </ul>

**Table 9-16. Freshwater Application Restrictions**

Chemical	Timing Windows	Restrictions/ Advisories	Treatment Limitations
<b>Sodium chloride &amp; Potassium chloride</b>	No, but check with WDFW before treatment to determine critical habitat areas.	None	<ul style="list-style-type: none"> <li>Use under tarpaulins or impermeable covers secured over the invasive organisms.</li> <li>Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>The Permittee may treat defined areas, such as coves or marinas, if the Permittee can limit water exchange behind impermeable barriers.</li> </ul> <p><b>Whole Lake</b></p> <ul style="list-style-type: none"> <li>The Permittee may treat <b>small water bodies</b> with potassium chloride where the threat of the invasive species outweighs other environmental damage and where water can be contained.</li> <li>For nonnative mussel eradication projects with potassium chloride, the Permittee must take steps to restore native mussel populations in the treated water body, when practicable.</li> </ul>
<b>Chlorine</b>	Yes, also check with WDFW before treatment to determine critical habitat areas.	Advise no swimming in area when placing chemicals under covers and removing covers.	<ul style="list-style-type: none"> <li>Limit treatments to the lowest effective concentration or amount (e.g. if using swimming pool pellets) necessary to kill the targeted organism.</li> <li>Where practicable, use chlorine dioxide/sodium chlorite instead of sodium hypochlorite or calcium hypochlorite.</li> <li>Use under tarpaulins or impermeable covers secured over the invasive organisms. Seal edges to the substrate as thoroughly as possible.</li> <li>Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>Leave tarpaulins on for at least one day before removing. If this is not possible, test for chlorine using a swimming pool test kit and neutralize any residual chlorine using ascorbic acid (vitamin C) before removing the cover.</li> </ul>

**Table 9-16. Freshwater Application Restrictions**

Chemical	Timing Windows	Restrictions/Advisories	Treatment Limitations
<b>Acetic Acid</b>	No, but check with WDFW before treatment to determine critical habitat areas.	Advise no swimming in area when placing chemicals under covers and removing covers.	<ul style="list-style-type: none"> <li>Limit treatments to the lowest effective concentration to kill the targeted organism (vinegar concentrations – 5-10% are reported to be effective for soft-bodied organisms).</li> <li>Use under tarpaulins or impermeable covers secured over the invasive organisms. Seal the edges to the substrate as thoroughly as possible.</li> <li>Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>Remove covers as soon as the target organisms are dead</li> </ul>
<b>Calcium hydroxide/oxide (lime)</b>	No	No	<ul style="list-style-type: none"> <li>Whole water body applications permitted.</li> <li>The pH of the receiving water must remain between 6 and 9. Stop treatment if pH goes above 9.0.</li> </ul>
<b>Rotenone</b>	Yes, also check with WDFW before treatment to determine critical habitat areas.	Follow EPA label restrictions	<ul style="list-style-type: none"> <li>Endangered Species Act (ESA) listed fish species must not be present at the time of treatment and for three months following treatment, unless the state and federal fish agencies approve a treatment.</li> <li>Except for emergencies or when in situations where invasive species may move out of water body if treatment is delayed, limit treatment to periods of low water, usually September or October, unless the water body has a closed basin.</li> <li>Limit airborne dust. In open water areas accessible by boat, use powdered rotenone mixed with water and apply as a slurry.</li> <li>Use liquid rotenone for spot applications only in areas that are not practicably accessible by boat.</li> <li>Unless the outlet is being treated for invasive species, in water bodies with flowing outlets, rotenone must be neutralized to eliminate downstream impacts. Below the neutralization zone (distance the water travels in 20 minutes), the rotenone must be totally neutralized using potassium permanganate. Residual potassium permanganate, not to exceed 2 mg/L past the neutralization zone.</li> <li>Follow monitoring requirements in Invasive Species Monitoring Tables 9-17 – 9-20.</li> <li>Restock the water body with appropriate fish species after eradication of the target species.</li> <li>Unless the outlet is being treated for invasive species, in water bodies with flowing outlets, rotenone must be neutralized to eliminate downstream impacts. Below the neutralization zone (distance the water travels in 20 minutes), the rotenone must be totally neutralized using potassium permanganate. Residual potassium permanganate, not to exceed 2 mg/L past the neutralization zone.</li> <li>Follow monitoring requirements in Invasive Species Monitoring Tables 9-17 – 9-20.</li> <li>Restock the water body with appropriate fish species after eradication of the target species.</li> </ul>

**Table 9-16. Freshwater Application Restrictions**

Chemical	Timing Windows	Restrictions/ Advisories	Treatment Limitations
<b>Antimycin-A</b>	Yes, also check with WDFW before treatment to determine critical habitat areas.	Follow EPA label restrictions	<ul style="list-style-type: none"> <li>• Use only in shallow water bodies and streams.</li> <li>• ESA-listed species must not be present at the time of treatment and for three months following treatment, unless the state and federal fish agencies approve the treatment.</li> <li>• Except for emergencies or in situations where invasive species may move out of water body if treatment is delayed, limit treatment to periods of low water, usually September or October, unless the water body has a closed basin.</li> <li>• Unless the outlet is being treated for invasive species, in water bodies with flowing outlets, antimycin-A must be neutralized to eliminate downstream impacts. Below the neutralization zone (distance the water travels in 20 minutes), the antimycin-A must be totally neutralized using KMnO<sub>4</sub>. Residual KMnO<sub>4</sub>, not to exceed 2 mg/L past the neutralization zone.</li> <li>• Follow monitoring requirements in Invasive Species Monitoring Tables 9-17 – 9-20.</li> <li>• Restock the water body with appropriate fish species after eradication of the target species.</li> </ul>
<b>Potassium permanganate (KMnO<sub>4</sub>)</b>	Yes, also check with WDFW before treatment to determine critical habitat areas.		<ul style="list-style-type: none"> <li>• Use under tarpaulins or impermeable covers secured over the invasive organisms.</li> <li>• Limit treatment to docks, boat hulls, and fixed objects or defined areas where the Permittee can secure impermeable covers.</li> <li>• The Permittee may treat defined areas, such as marinas, if the Permittee can limit water exchange behind impermeable barriers.</li> <li>• The Permittee may treat enclosed, small water bodies where the threat of the invasive species outweighs other environmental damage.</li> <li>• When used to neutralize rotenone or antimycin treated waters – use calibrated equipment to achieve the minimum effective concentration of potassium permanganate necessary to oxidize the rotenone within the neutralization zone.</li> </ul>
<b>Endothall (Hydrothol 191™)</b>	Yes	Contact <b>recreational restriction</b> during and 24-hours after treatment (in the entire water body)	<ul style="list-style-type: none"> <li>• Treatment shall occur from the <b>shoreline</b> outward into the waterbody.</li> <li>• Juvenile salmon species and ESA-listed species must not be present at the time of treatment.</li> </ul>
<b>Sodium carbonate peroxyhydrate</b>	No	Swimming advisory during treatment, and 2-hour post-treatment	None
<b>Methoprene</b>	No	None	<ul style="list-style-type: none"> <li>• Do not apply in state-listed restricted use areas identified in Condition iv.B.4 under Section 9.10.6 of this permit without consulting with WDFW habitat biologists.</li> </ul>

**Table 9-16. Freshwater Application Restrictions**

Chemical	Timing Windows	Restrictions/ Advisories	Treatment Limitations
<b>Chelated Copper</b>	Yes	None	<ul style="list-style-type: none"> <li>• Use lowest effective concentration to kill targeted organism</li> <li>• Sediment copper concentrations in the treatment area must be less than 110 mg/kg (emergency exception for zebra or quagga mussel treatment, if there are no other suitable controls available).</li> <li>• Do not apply copper if the water hardness is less than 50 mg/L expressed as calcium carbonate (emergency exception for zebra or quagga mussel treatment).</li> <li>• Do not apply copper if the pH is less than 6.0 (emergency exception for zebra or quagga mussel treatment).</li> <li>• Juvenile salmon species and Endangered Species Act listed species must not be present at the time of treatment, unless the state and federal fish agencies approve the treatment.</li> </ul>
<b><i>P. fluorescens</i> strain CLO145</b>	No	None	None
<b>Heating/ cooling</b>	No, check with WDFW for critical habitat areas.	None	<ul style="list-style-type: none"> <li>• Limit treatment to docks, boat hulls, and fixed objects or defined areas.</li> <li>• Direct heat or cold only at target organisms</li> <li>• May use in conjunction with pressure washing to remove invasive organisms from docks and infrastructure.</li> </ul>

### 5. Monitoring for Specific Chemicals

The Permittee must monitor for specific chemicals/products as identified in Tables 9-17 – 9-20. All laboratory results for chemical concentrations must include the following information:

- a. Sampling date
- b. Sample location (water body name and location within the water body)
- c. Date of analysis
- d. Parameter name
- e. Chemical Abstract Service (CAS) number
- f. Analytical method number
- g. Method detection limit (MDL)
- h. Laboratory practical quantitation limit (PQL)
- i. Reporting units
- j. Concentration detected

**Table 9-17: Invasive Species Monitoring**

<b>Chemical or Control Measures</b>	<b>Specific Monitoring Requirements</b>
<b>Sodium chloride &amp; Potassium chloride</b>	<ul style="list-style-type: none"> <li>For whole lake treatments or treatments of areas sequestered behind barriers within a larger fresh water body, the Permittee must at a minimum measure potassium or sodium chloride concentrations at one or more representative sampling locations pre-treatment, one, and five days post-treatment to determine actual water body concentrations.</li> </ul>
<b>Chlorine</b>	<ul style="list-style-type: none"> <li>The Permittee must monitor for chlorine concentrations under impermeable covers on a representative number of sites before removing the covers. Permittee may use swimming pool test kits for this purpose.</li> <li>If monitoring demonstrates that undercover chlorine concentrations are always under 0.5 mg/L before removal (at a representative number of sites and for the same chlorine formulation), the Permittee may suspend monitoring upon Ecology approval.</li> </ul>
<b>Acetic Acid</b>	<ul style="list-style-type: none"> <li>When removing impermeable covers, monitor pH levels in the receiving water before and immediately after cover removal</li> <li>When directly spraying the organisms, monitor the pH of receiving waters directly adjacent to the organisms immediately before and after treatment.</li> </ul>
<b>Calcium hydroxide/oxide (lime)</b>	<b>For Freshwater Treatments Only</b> <ul style="list-style-type: none"> <li>Measure pH once a day before treatment; once in the morning and once in the afternoon during treatment; and for ten days following treatment at a representative site within the water body.</li> <li>For applications using continuous injection systems, measure pH once in the morning and once in the afternoon</li> </ul>
<b>Rotenone and Antimycin-A</b>	<ul style="list-style-type: none"> <li>See Tables 9-18 – 9-20 for specific monitoring requirements for rotenone and antimycin-A.</li> </ul>
<b>Copper</b>	<ul style="list-style-type: none"> <li>Before applying copper, measure sediment copper concentrations in a composite sample of sediment from a representative treatment area (composite sample from 5 areas with sediment taken from the top 5 cm of sediment and homogenized).</li> <li>Measure pH and hardness prior to treatment.</li> </ul>
<b>Heat/Freezing</b>	<ul style="list-style-type: none"> <li>If used in conjunction with pressure washing to remove invasive organisms from docks and infrastructure, measure the temperature of the receiving water immediately before and immediately after the activity.</li> </ul>

**Table 9-18. Pre-treatment monitoring for rotenone and antimycin-A**

<b>Parameters</b>	<b>Units</b>	<b>Minimum Sampling Frequency</b>	<b>Type</b>	<b>Sampling Point</b>
pH	Standard	Once	Grab	Representative
Temperature	°Fahrenheit (F)	Once	Grab	Representative
Alkalinity <sup>1</sup>	mg/L CaCO <sub>3</sub>	Once	Grab	Worst-case scenario
Organic demand <sup>1,2</sup>	Standard	Once	Grab	Worst-case scenario

<sup>1</sup>Only required when the Permittee uses potassium permanganate to neutralize rotenone.<sup>2</sup>The Permittee must use the guidelines provided in Engstrom-Heg (1971) to determine organic demand for KMnO<sub>4</sub>.

**Table 9-19. Post-treatment monitoring for rotenone and antimycin-A**

Parameters	Units	Minimum Sampling Frequency	Type	Sampling Point
pH	Standard	Once	Grab	Representative
Temperature	°F	Once	Grab	Representative
Rotenone Trout Toxicity Bioassay: 24-hr live box test (five trout); 60% trout survival	Hours until 60% survival	Once approximately three to eight weeks after treatment	Observation (No lab accreditation required)	Worst-case scenario
<i>If the Permittee applies liquid rotenone: <b>Volatile Organic Compound (VOC)</b>, semi VOC, and any other inert ingredients listed on the <b>Material Safety Data Sheet (MSDS)</b></i> <sup>1</sup>	µg/L	Four weeks post treatment and every week thereafter until non-detection	Grab	Worst-case scenario

<sup>1</sup>The Permittee must sample for VOC and semi-VOC when the liquid rotenone product used contains solvents that are listed on the label and/or the MSDS.

**Table 9-20. Monitoring for downstream and neutralized waters after rotenone or antimycin-A treatment**

Parameters	Units	Minimum Sampling Frequency	Type	Sampling Point
pH	Standard	<ul style="list-style-type: none"> <li>Once pre-treatment</li> <li>Once post-treatment</li> </ul>	Grab	Representative
Temperature	°F	<ul style="list-style-type: none"> <li>Once pre-treatment</li> <li>Once post-treatment</li> </ul>	Grab	Representative
Alkalinity <sup>1</sup>	mg/L as CaCO <sub>3</sub>	<ul style="list-style-type: none"> <li>Once pre-treatment</li> </ul>	Grab	Worst-case scenario
Organic demand <sup>1,2</sup>	Standard	<ul style="list-style-type: none"> <li>Once pre-treatment</li> </ul>	Grab	Worst-case scenario
Rotenone (if applied) <sup>3</sup>	mg/L	<ul style="list-style-type: none"> <li>Once 24 hours after treatment</li> </ul>	Grab	Worst-case scenario
<i>If the permittee applies liquid rotenone: VOC, semi-VOC, and any other inert ingredients listed on the MSDS</i> <sup>3</sup>	µg/L	<ul style="list-style-type: none"> <li>24 hours post treatment</li> <li>Four weeks post treatment</li> </ul>	Grab	Worst-case scenario
Antimycin-A (if applied) <sup>3</sup>	µg/L	<ul style="list-style-type: none"> <li>Once 24 hours following treatment</li> </ul>	Grab	Worst-case scenario
Rotenone Trout Toxicity Bioassay: 24-hr live box test (5 trout)	% survival	<ul style="list-style-type: none"> <li>Begin test at time of treatment</li> <li>Repeat weekly until upstream water is detoxified.</li> </ul>	Observation (No lab accreditation required)	Worst-case scenario

<sup>1</sup> Only required when the Permittee uses potassium permanganate to neutralize the rotenone.

<sup>2</sup> The Permittee must use the guidelines provided in Engstrom-Heg (1971) to determine organic demand for KMnO<sub>4</sub>.

<sup>3</sup> The Permittee must use EPA approved testing methods in 40 CFR Part 136

**xii. Forest Canopy Pest Control**

Permittees performing forest canopy pest control must follow the requirements in Title 76 RCW (Forests and Forest Products).

**xiii. Annual Reporting**

- A. Permittees must submit an annual report to Ecology containing the following for the treatment season:
1. Permit Number,
  2. Permittee Name,
  3. Name of the location/waterbody treated.,
  4. Active ingredient(s) used(e.g. Bti, permethrin, etc.),
  5. Total amount of active ingredient applied for each season,
  6. Total acreage applied to,
  7. Measurement units (pounds or gallons), and
  8. Attach any other monitoring and reporting requirements (e.g., annual monitoring reports) to the annual report when submitting it to Ecology.
  9. Attach any Treatment Window determinations from WDFW to the annual report, including lake name, location (lat/long), treatment windows dates, and the reason for the treatment restrictions (e.g. salmonid smolts, grebe nesting, etc). This should be in a letter or email from WDFW staff confirming the Treatment Window change.
- B. Ecology must receive the annual report by December 31 of each year. Mail the annual report to:

Department of Ecology  
Water Quality Program  
Attn: Aquatic Pesticides Permit Manager  
PO Box 47600  
Olympia, WA 98504

**xiv. Public Notice**

Ecology includes public notification and treatment area postings in the pesticide permits it issues. State law does not require the public notification and treatment area postings. They are intended to respect the public's right to know (transparency in government), and to protect the public health and welfare by reducing the public's exposure to pesticides. Ecology strongly recommends that the public be provide with public notice of pesticide treatments through public notification and treatment area postings.

The permittee could publish a public notice in a newspaper of general circulation in the area where treatment will occur, prior to the first application of the season. The newspaper notice could contain:

1. Proposed schedule of treatments for the season.

2. Common name of the water body to be treated.
3. Chemicals to be used.
4. Any water use restrictions or precautions
5. Contact information of the Permittee and any agency staff involved.
6. Ecology's regional twenty-four (24) hour Emergency number.
7. Notification shall explain the project and explain that any treated areas will be flagged no more than 48 hours before treatment begins.

The Permittee is encouraged to use Ecology posting templates contained in each pesticide permit to post the treated areas, where feasible, at 100-foot intervals to 400 feet beyond the boundary of the treatment area.

Signs posting treatment areas should be posted before treatment commenced, but no more than 48 hours before the start of treatment. Signs should also be posted in the commonly spoken language of the area where treatment is occurring.

#### 9.10.7 Indian Country lands within the State of Washington

##### a. Puyallup Tribe of Indians

- i. Applications of pesticides within the Puyallup Tribe Reservation are not eligible for discharge coverage under this permit. Contact EPA Region 10 office for an individual permit application.